THE BIGGEST INDEPENDENT MAGAZINE FOR THE AMSTRAD CPC 464 ● 664 ● 6128

ISSUE 40 ● CHRISTMAS 1988/JANUARY 1989 ● SPECIAL ISSUE! £1.50

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FRONT END

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AA SPECIAL

AMSTRAD ACTION

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January – June 1988

ACTION TEST

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SERIOUS SIDE

SOFTWARE●HARDWARE●PROGRAMMING

GOODBYE CPCC

So the rumours were right. *CPC Computing* is no more – or rather, it's been merged into *Amstrad Computer User*, the 'official' one *(see Amscene for the full story)*. We're at least partly responsible, of course: after all, their circulation figures had been plummeting at the same time ours have continued to soar (no, not a coincidence). But it's a pity, too, in a way, for it means now that what you have in your hands is now the only independent newsstand magazine for the CPC.

As such, we have an even greater responsibility to remain fiercely critical when you, the people who sustain the CPC market, are being hard done by. On the other hand, we don't mind giving credit where it's due. By inviting Incentive to grace our Christmas Cover with their *Total Eclipse Trainer*, we're hoping to encourage quality – and surely that's something we can all agree upon?

WRAPPING UP

WHAT TO BUY●BYE!

A STAR AT CHRISTMAS

No doubt like us you've drooled over many a really first class printer. Now you can enter *AA's* great competition, in conjunction with Star Micronics, and win either the super quality Star 24-pin LC24-10 or the colourful Star LC-10 Colour. And entering couldn't be simpler...

Rules

1. The judge's decision is final and legally binding.
2. No correspondence will be entered into concerning this competition.
3. Photocopies of the entry form will be accepted, but only one entry per entrant is permitted.
4. Entry implies acceptance of these rules.
5. The competition is open to all *Amstrad Action* readers with the exception of employees of Future Publishing Ltd and Star Micronics Ltd.
6. Entries should be sealed in an envelope. The winner will be notified in writing and the results will be published in *Amstrad Action*.

● Send your entry to *A Star At Christmas* 4 Queen St, Bath, BA1 1EJ before 15th January 1989.

Christmas is coming (oh, you'd noticed), and no doubt you're thinking of what presents you want. How about a superb top-quality printer, for all those letters, accounts, and artwork you always said you'd do if only you had the hardware? What's that? Can't afford it? Know the feeling.

Well, now's your chance! Top up your stocking by entering our Star Santa Special competition and win one of Star's fabulous printers. And because it's Christmas and everyone's supposed to be feeling all festive and that *(bah humbug – ed)*, we've made it very simple to enter.

All you have to do, for a chance of winning one of these fabulous prizes, is answer the questions, then to indicate which printer (LC-10 Colour or LC24-10) you'd prefer to win and why. And that's it! Couldn't be simpler. ●

THE COMPETITION

1. Arrange the following anagrams into well-known phrases:
a) STAR'S ENGINE GOES (a Christmas message: two words);
Answer: ______
b) A STAR MAD TONIC (computer magazine, two words);
Answer: ______
c) STAR'S NOG TOAST (where Father Christmas hangs out, two words)
Answer: ______

2. Name the Stars:
a) Luke Skywalker's space adventure ______
b) A famous pop fivesome ______
c) Captain Kirk's journey ______

3. And to finish, here's a few questions about Wales (where Star have just opened a factory).
All you have to do is to unravel these simple clues:
a) A saint and a fire-breather ______
b) The highest mountain in Wales ______
c) Large onion and Welsh emblem ______

I would prefer to win the Star LC24-10/LC-10 Colour* because (in no more than ten words) *Delete as appropriate: ______

______

Name: ______
Address: ______

______
Tel: ______

THE PRIZES



Both printers are superb prizes, the LC24-10 with its precision 24-pin printhead for true letter quality printing and the LC-10 Colour. Both machines offer eight fonts (including italics) and Pica, Elite, Condensed and Proportional spacing. The LC24-10 can also produce special effects such as shadow, outline and shadow outline printing. Both printers are also equipped with Star's useful 'paper parking' facility, so you don't have to remove continuous paper when using single sheets!

The LC24-10 prints at 170 cps in draft and 57 cps in letter quality mode, while the LC-10 Coolour prints at 144 cps for draft and 36 cps for near letter quality. And remember, with Star's comprehensive front control panel you'll rarely have to fiddle about with DIP switches!



AMSCENE

If the writ fits... CPC news, obituaries and job opportunities

ALTERNATIVE STOLE FROM US, CODEMASTERS CLAIM

Codemasters have issued a writ in the High Court in London seeking an injunction against Alternative, alleging breach of copyright. The legal move concerns Alternative's re-release of the old CRL game *Formula One* as *Formula Grand Prix*, with a cover bearing a marked resemblance to Codemasters 1987 hit *Grand Prix Simulator*, and is part of a 'tough new policy' against those who allegedly steal their 'intellectual copyright'.

Roger Hulley of Alternative responded wearily: 'It's just a very tacky way of dealing with things, that's all. There's a wonderful invention called the telephone, and it would have been a much more pleasant way of dealing with it. Still, Codemasters always take the tacky way' – a veiled reference to the fact that Codemasters published an advertisement in the trade paper *CTW* earlier this year speaking of 'inferior alternatives'. An apology appeared shortly afterwards.

Asked if he was going to defend the action, he replied: 'All the way. We're going to take this to its logical conclusion'. Codemasters were 'playing at schoolboys. Alternative have been wronged'.

The two covers, Hulley says, are 'Absolutely totally different' – which is something of an overstatement (see pictures).

No doubt this whole sorry episode, like so many others, will soon blow over and be forgotten. It is unfortunate, however, because what lingers in the minds of the public is a vague and unjustified belief that the whole software industry is rotten to the core.



● David Darling, Codemasters MD: 'Tough new policy'



● Roger Hulley: 'Alternative have been wronged'



● Variations on a theme: left, Codemasters' *Grand Prix Simulator*; and Alternative's *Formula Grand Prix*. Coincidence – or theft?

Better dead than read

CPC Computing, formerly *Computing with the Amstrad CPC*, is no more.

The title merges with *Amstrad Computer User* from January, leaving *Amstrad Action* as the only independent CPC newsstand magazine.

The merged title, claims Mike Cowley, of Database, is to be a 'bigger and better ACU, featuring the best elements of both magazines'. The result, it is said, will be a 'supertitle', which will 'knock Amstrad Action for six'.

According to Cowley the merger was one of four options under consideration:

1 CPCC to carry on ambitiously, with a large injection of cash. (In fact, the magazine was relaunched only a couple of months ago. Clearly this didn't work, or it wouldn't be about to be swallowed up by another title);
2 Close;
3 Sell the title to Amstrad Action. 'But we didn't think they'd be able to come up with enough money', Cowley says;
4 Merge with Amstrad Computer User.

At least three of the above options created gales of laughter at Future Publishing, the company which produces Amstrad Action. Publisher Greg Ingham commented: 'They've done the decent thing and put the poor beast out of its misery. They've admitted the sheer impossibility of competing with *Amstrad Action* and called it a day'.



● *CPCC* RIP: no flowers, please

Cowley is quoted on Micronet as claiming that the new merged title '*will become* the leading Amstrad magazine' (italics added) – a clear acknowledgement, if one was needed, that it wasn't already. (Now who does that leave, we wonder?) This is known not to have pleased staff. However, Cowley now says he was misquoted.

AA is after you!

Do you want to begin a career in computer journalism? Are you enthusiastic? Can you write games reviews? Good! We need you.

We're looking for a bright, keen young person to employ as a full-time games reviewer. We're based in Bath, prospects are good and you'll be working for one of Britain's fastest growing publishers. But you'll have to prove you enjoy a challenge and can produce well-written copy to deadline. What are you waiting for? Make that call! Ring Steve Carey, the editor, on 0225 446034.

Future Publishing is an equal opportunities employer.

Alarming news for CPC

Evening all. Your average villain is a devious chappie, always on the look out for unprotected kit. And there's nothing Johnny Burglar likes less than Homeguard's anti-theft piercing 107 decibel alarm at just £19.99 with no wiring necessary available from leading High Street retailers, hardware, DIY and Department Stores. A major contribution to CPC safety, it says here.

But what if the alarm is activated accidentally, I hear you ask? Well, funny you should ask, because it can be silenced by inserting the magnetic key supplied.

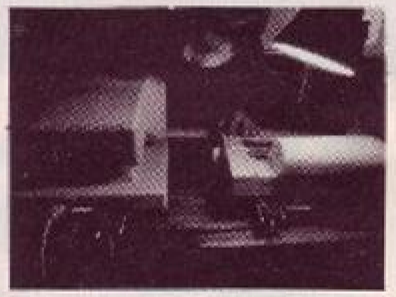
You know it makes sense.

● **And if that doesn't stop the blighters, what about this: high strength pvc-insulated steel cable fixed to the terminal at one end and by steel plates glued or screwed to the wall at the other. The screws have one-way heads, while the computer end is connected with a breakaway key which snaps off after tightening. 'The only way the protected equipment can be removed', say Blair Security (☎ 0922 710510), 'is by sawing through the cable with a hacksaw'. Two sizes are available, costing between** £5 and £7.



▲ A sight to make Johnny Burglar quake in his boots: The . Homeguard safety alarm

Our hardware correspondent, Ivan O'Level, points out that the Blair Security Computer Seal is not suitable for portable computers.

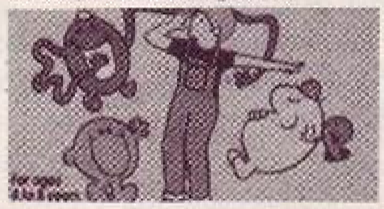


▲ And the Blair Security Seal. Best to make sure you can reach a power point first.

Yearning for learning? Read on

As every parent who has tried will know, finding good educational material for use on the CPC is like searching for the Holy Grail/lost chord/fiver you left in your other jacket (delete as applicable). You'll be pleased to hear, then, of a mail order firm specialising in the supply of this elusive item.

Rickitt Educational Media (☎ 0460 57152) will send you a free colour catalogue on one condition: that you ask for it. We hope to review some of their packages as soon as they get around to sending it to us (hope they're quicker with the catalogue than they are with the review copies), but here's a couple of examples...



▲ Learn and have fun with *your* computer!

- **'Early Words' (Willow Software): age 3-6 – £9.14 tape/£14.89 disk:** ***spelling with pictures;***
- **'Caesar's Travels' (Mirrorsoft): 3-9 – £11.50 tape: word-recognition, shape and colour matching &c ;**
- **'Here and There with the Mr Men' (Mirrorsoft): ages 4-8 – £11.50 tape;** ***entertaining and rewarding early learning games'***
- **'Micro Maths' (LCL): 8-adult – £27.60 tape/disk** ***'24 easy-to-use programs for self-tuition/revision to O-Level' (that's what they think).***

More trouble up ahead for PC200

Amstrad's coolly received Sinclair PC200 faces further difficulties from European ex-partners Schneider.

The threat comes in the form of the Euro PC – not a roving detective with a brief to clobber lager louts, but a direct competitor for the 'Sinclair Professional'. It's to be distributed by Greyhound Marketing (of Cliffdale House, 376 Meanwood Rd, Leeds), which should provide a few 'Schneider run with Greyhound'-type headlines (but not here folks, not here!). Spec includes 12in mono monitor (£359 including VAT) or 14in colour (£631). The PC drift towards 3.5inch drives is continued, by the way.

The good part is the bundle, which includes Microsoft *Works* (allegedly worth £145, but certainly better value than the PC200 *Professional Organiser*-plus-a-few-games deal).



▲ Greyhound's Phil Allott and Bob Simpson prepare to put the boot in on Sugar's 'Sinclair Professional'

The record show

- Attendance at the Earls Court PC Show was 99,030 – 36% up on '87.
- 71,581 were business/professional visitors; 10,498 were trade.
- Reason for attending was split neatly (too neatly?) three ways:34% to see business products, 36% for the leisure market and the remainder for both.

Joysticks from beyond the grave

Ever been waggling away when all of a sudden the knob of your joystick comes off in your hand? And have you found yourself just about to destroy the mothership when your button gets jammed?

You probably produce a stream of short Anglo-Saxon words and then set off into town to find an expensive new joystick.

Now there is an alternative: reconditioned joysticks from Roebuck Designs Ltd. Send them your non-functioning joystick and they send back one of the same model for only £4.50 (including VAT and postage). The joystick is guaranteed – but only for a month. Well, what are you waiting for? Send your broken down old stick to: **Roebuck Designs Ltd, Victory Works, Birds Hill, Letchworth, Herts SG6 1HX ☎ 0462 480723/480929**

Postman Pat in 'Addictive' own goal blunder probe

Oops! We laid the blame at the wrong feet: in fact *Postman Pat* is by Alternative Software. Sorry chaps (don't know who we should apologise more to, the people who are doing it or the people we accused of doing it!).



▲ 'Ere Mrs Miggins, that *Amstrad Action* said I was Addictive, when I'm really Alternative'

Active bid for *Freedom*

Don't know quite what to make of this. French label **Coktel Vision** (don't ask me, I didn't give them their name) proudly present *Freedom*. Set in the colonies in the eighteenth century, it's all about unhappy slaves, led by your good self, making a desperate bid for – that's right – freedom. The foreman, the stewards and the manager 'all have different physical appearances and personalities' (well fancy that), and you also face the fearsome guard dogs set at your heels.

'The game', according to Active, who are distributing the game, 'has the structure of a war game with strategic and tactical phases'. And of course there's role-playing.

Now it's well known that the French are somewhat more imaginative in their game creation, but what do you make of this one? For: strong plot, historical setting etc. Against: trite rubbish, bad taste etc. Seems like we'll just have to wait until the game's released to find out.

P.S. We'll soon be able to see what Coktel Vision have made of Walt Disney's 'Jungle Book', due for release in the new year.

Know what I mean, Barry?



▲ The 'Clones cyclone' Barry McGuigan takes time out to give a boost to Superior/Alligata's entertaining boxing sim, *By Fair Means or Foul* (*Raved* in *AA38*). Funny, we thought Activision's *Barry McGuigan's Boxing* already had the wee man's seal of approval. Not that we're getting at Bazza, of course, heavens no what gave you that idea (nervous laugh)?

Barry McGuigan would not like to thank Mr Eastwood.

COMPETITION WINNERS

We've eventually managed to stagger out from under the amazing heap of entries for our three recent competitions. If only we'd thought to arrange a deal with the Post Office for bringing them all that extra work!

Second prize in our 'Not Completely Serious Competition' (*AA36*) goes to Mr. Alistair Hamilton of Sutton Grange Close, Harrogate, North Yorkshire; and the first prize winner is R P Binns of Heath Road, Beaconsfield, Bucks.

There were a whole heap of winners of the US Gold (also *AA36*) *Heroes of the Lance* competition.

First prize goes to lucky old Mr Michael Michaelides of Popes Lane, Ealing.

Second prize to Mr Richard Palmer of High Street, Godstone. Third prize: Mr Andrew Bradshaw of Rose Walk, Purley; Miss R Hurley of Morden Street, Liverpool; Mr T C Ward of Cemetery Road, Wath on Derne, Rotherham; Damien Ryan of Thirlestance Terrace, Dublin; Claire Jenkins of Pines Gardens, Llanidloes Road, Newtown. Copies of *Heroes of the Lance* go to Mr D. Silk of Wylye Road, Warminster; Mr Philip Williams of Park Close, Ashby-De-La-Zouch; Mr Benjamin Chee of Stilecroft Gardens, Wembley; Mr Gareth Powell of Duckpool Road, Newport in Gwent; and Mr Andrew Newsam of the University of Warwick.





Copies of the *DRAGONLACE* Boardgame go to: Richard Ormson of Heapy Close, Bury; Mr J Henderson of Lichfield Drive, Brixham; Ms Susan Meathrel of Fulmead Road, Reading; Mr Chris Hoy of Tweedsmuir Road, Perth; and finally, Mr (or Ms?) S M Weaver of Lumoden. Whew!

Oh, and fifty of you lucky people should soon be hearing the satisfying plop of a copy of Codemasters' *Four Soccer Simulators* falling through your letterbox.

Computer Boards

CDS Software have been quiet lately. The reason: *Tank Attack*. It's an 'interactive computer/board game', meaning you need to set up a board with plastic pieces on it next to your CPC. Two to four players take part.

Due for release just this side of Christmas, *Tank Attack* comes in a large box containing the board, plastic playing pieces and cassette/disk.



Nazi business

Interceptor are currently working on *F14 Tomcat*, due for release in early '89 on the budget Players label. You pilot the aforementioned aircraft through six levels of increasing difficulty populated by enemy aircraft, ships, tanks and ground installations.

Also due on the same label is *Into the Eagle's Nest*, a *Gauntlet-ish* game set in a fortified Nazi stronghold. Rather than being a straight re-release, though, there have been some improvements made to the music, sound and graphics.



Long ago, in a galaxy (etcetera)...

... there was a trilogy of movies: *Star Wars* (bet it's on again this Christmas), *The Empire Strikes Back* and *Return of the Jedi*. The first two became above average computer games and now the last of the trilogy blasts its way onto the small screen.

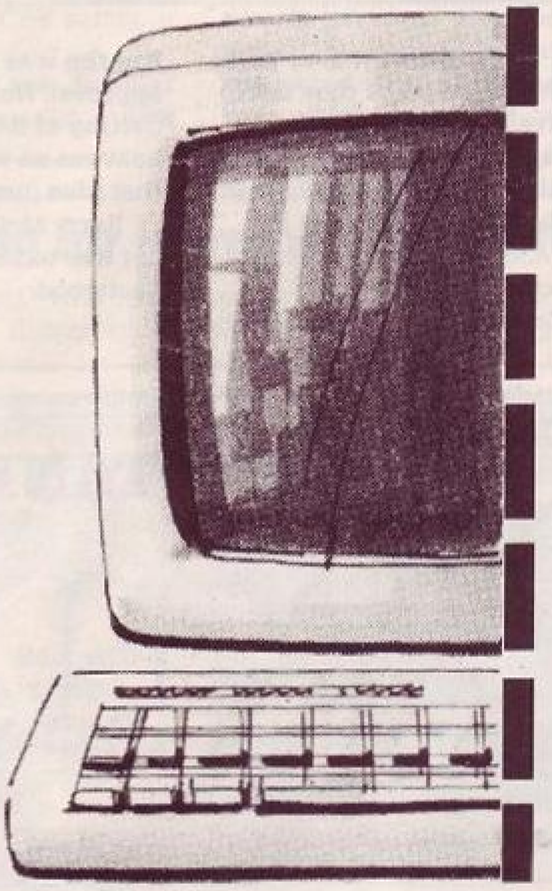
Have Domark got it right at last with a *Star Wars* game, or just come up with another average release? Find out next month...



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A Message from Amstrad's Chairman . . . . .

Dear Amstrad Computer User,

You don't need me to remind you that you have selected the best computer in it's price range. Numerous journalists from the specialist press have now contributed to the opinion that Amstrad computers represent the best all-round machine you can buy.

One of the many reasons why computer journalists have received our products so enthusiastically is undoubtedly our careful attention to providing information on the system and it's software.

You can be a part of Amstrad's ongoing effort to inform and help users by taking advantage of this opportunity to join the User Club. Catering only for the Amstrad computer user, this specialist support club was initially formed by Amstrad solely for the purpose of assisting you with all your computer needs.

There are many immediate and direct benefits available, so don't delay before filling out the application form below and sending it back to Amsoft.

Yours sincerely,

Alan Sugar
Chairman AMSTRAD Plc



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REACTION

Letters topical, controversial, cynical...

Letters, pray!

Whether it's our reviews, the games that get released these days, the price of disks, or whatever, no doubt something in this issue of *Amstrad Action*, or something that happens to you this month, is going to:
a) get your goat;
b) tickle your fancy;
c)rub you up the wrong way, or even;
d) all of the above.

But don't just keep it under your hat – let off steam! We care, and we listen. Every single letter we receive is read, and we publish as many as we can. And one letter each month wins a software voucher for £15!

Get the writing paper out – or your printer – and write now to: *Reaction, Amstrad Action*, 4Queen Street,, Bath BA1 1EJ.

How easy is 'easy'?

After reading the review of *Micro Music Creator* in *AA*38 I sent off for one for my 10 year old son. Regrettably the review was in many ways of the handbook and not the working program. The amendment slip merely tells you two out of five functions, demo and help, have been omitted due to lack of memory space. Since both of these struck me as being of great use and their omission appears to be as a result of a very lengthy protection system I am rather angry about it.

With kids using computers the need for making copies is ever present – regularly one of my kids or a friend will corrupt a disk and it's important to be able to replace the program from the master disk. *Micro Music Creator* not only prevents back-up but it also runs with write protect off!

Is First Byte going to replace damaged disks? If lack of disk space was a problem there was an easy way to solve it – the unused second side could have had the game on it.

When *AA* reviews software could you not try out all aspects of it, as clearly not all producers are selling all that they appear to claim. And please say if back-ups are no go, since I for one don't get software I know is unbackupable. I must say, though, I don't understand why such expensive effort is needed for a £15 program. I use programs costing £1,000 at work and all are backed up (we wouldn't buy them if they couldn't be).

John Barrett
Essex

A spokesman for First Byte Software said:

'First, the protection system takes up one sector of track 0. Since the system thinks the disk is CPM format you don't in fact lose any storage space. 1K is taken up by the boot program – but that's hardly excessive! What does take up room is the Digitizer, composer, Empty Tummy and various example sound files.

'Secondly, the composer has a help section which details all key presses. And the Digitizer uses cursor or joystick movements plus the spacebar for accessing functions. Empty Tummy features a scrolling message which details the key controls. There's also a manual which contains everything you might need. And you say you need a help file?

'Finally, we will gladly replace corrupted software.'

And Pat McDonald, who wrote the review, said: 'I actually don't think there's any need for a helpfile or demo. Compared to the AMS it is easy to use! But that doesn't mean that any ten year old could pick it up and start using it at once – very little serious software is that easy! I do think there's a case to be made for the parent of any child checking to see if the software will be suitable. The best way to do that is to ring the telephone number given with each review: anyone in a company's marketing or sales department should be able to help. And, as always, get a name you can quote back if you're not happy!'

Chuckie's back!

I have just received my first computer the CPC 464, and I'm very pleased with it too. I once used my friend's computer a couple of years ago and played a game called *Chuckie Egg*. Is this wonderful creation still available from anywhere?
Tracey Serrano
Merthyr Tydfil

Funny you should ask, because only the other day we heard that Pick and Choose of Manchester are apparently selling the old A'n'F classic (originally reviewed way back in AA1) at £3.95. Rush your order to them at 45 Bury New Rd, Manchester or even better ☎ 061 831 7922.

Miscalculation

I dismissed *MasterFile III* as, according to your reviews, it only supports field totals. However, field-to-field calculations are supported without having to use BASIC. While this has not changed my final decision it would appear that *Masterfile III* did not get accurate coverage in your review.

Tom McDonagh
Co Dublin, Ireland

Hurry must end soon open bank holiday Monday buy now save £££s!

I looked in your *Special Offers* pages this month for *AA* binders only to find that you don't do them any more! Why not?

I notice recently that you have withdrawn a lot of your earlier offers, such as your excellent *Lords of Midnight* offer, which I would have taken advantage of if I had any money at the time.

Is there any chance of purchasing a copy of *Lords of Midnight*, if you still have any in stock, and, if not, could you tell me where I could get a copy?
Stephen Trimmer
Broadstairs

Mike Scialom, who runs our* Special Offers*, says:

***'First the good news. The only reason the AA binders weren't in* Special Offers *was pressure of space. As you can see if you look in this month's* Special Offers*, beginning on page 87, we are constantly updating our offers so that we can pass on to you our massive buying power' (oh no, he's off). 'Where was I? Oh yes, the binders. They are still available, and we're selling as many of them as we ever have. The Order Code is AA217, the price is still a remarkable £4 per binder, and the address and so on is in* Special Offers.**

'And now for the bad news: supplies of Lords of Midnight have completely dried up, and I've spent many fruitless hours trying to trace some more.

Perhaps if any of your readers know of a plentiful source they could write in and let us know?'

The lesson would seem to be that we can't guarantee how long any offer will last for.

What's the Bismarck doing in *AA*?

Night Raider has been let down by some shaky research by Gremlin. The Bismarck was attacked and torpedoed by Fairy Swordfish biplanes and not by Grumman Avenger as stated in your review (AA36).
Kim Wells
Aylesbury

Well, yes and no, Kim. We're no WWII historians (and we're certainly open to correction), but the first attacks on the Bismarck – which had just sunk the battlecruiser Hood, with the loss of all but three of the 1,400 crew and officers – were indeed made by nine Swordfish bi-planes of the 825 Squadron on May 24th, 1941: to that extent you're right. But the main damage was, as Gremlin say, inflicted by the new American prototype torpedo plane, the Grumman Avenger.

But as I say, we're hardly experts on the subject, and further contributions are certainly welcome.

Oops! You're quite right, Tom. We've been caught napping, and our only defence is to plead ignorance, blame it on Richard Monteiro who wrote the original review and isn't around to take the flak, and move quickly on...



"BIT SENSITIVE, THAT TUTOR..."

Skillometer

I enjoy playing games of all kinds, but to be honest am not too skillful in any one area. So, some indication of skill required – such as 'skill level 3 - 8' (on a scale up to 10) would tell me I had a chance of playing the game with some degree of success in a relatively short time. This also shows any new owners what games they could cut their teeth on.

I'm sure there are new people out there somewhere. People don't get issued a video games machine on their 3rd Birthday you know, they have to start somewhere.
Cpl Nick Grazier
RAF Gutersloh

It's not a bad idea, Nick, but I could foresee endless argument about what skill level a game might be.

After all, that is at least in theory something objective, while the Value Verdict makes no serious claim to be so. Still, if enough people indicate (i.e. write in saying so!) we are happy to give the people what they want!

What on earth is *astrology* doing here?

What on Earth is astrology doing in a CPC mag?
It may not be immediately apparent to everyone, but, in the world of astrology, computers are ruled by Uranus, brunt of a thousand schoolboy jokes and the planet concerned with originality, technology and change.

At the end of 1981, coincident with the birth of the first real home computer, the ZX81, Uranus slipped silently and for the large part unnoticed, into Sagittarius, the sign dedicated to inspiration, excitement and fun. Almost overnight the potential for entertainment was realised and the home computer became the home games machine, dominated by wonderfully exciting and colourfully flamboyant space races and dungeon romps.

Now, seven years on, Uranus is once again poised to change its celestial tenancy. In December of this year it will quit Sagittarius, the symbolic child of the zodiac, for good (as far as we are concerned) and move into the maturity of Capricorn, a more comfortable and powerful position for it, and an infinitely more controlled industrious and organising influence for us.

It has become a noticeable feature over the past few months during its transition, that the content of computer magazines in general (your own included) has tended to become less frivolous and somewhat more orientated to the serious user – indicating presumably their readers' requirements. Even the programs/programmers themselves are starting to reflect a more responsible attitude and depth of response to what is needed.

Does this mean that home computing is about to come of age. Will 1989 see a completely new range of influences and motivations for the home computer user, more realistic gameplay, more customer satisfaction, more value?

Or does it just mean that Gary Barrett will manage not to lose so many of my cheats? Either way it has to be an improvement.
Phil Howard
Nottingham

We're completely speechless, nearly. Here we were, convinced that the Man from Mapperley was only the world's greatest pokemaster, and it turns out he's a secret astrologer as well!

Anything else we should know about – any nuclear physics you get up to in your spare time, Phil? Hang-gliding? Espionage?

dBASE 3+? Look, are you absolutely certain this is *Amstrad Action?*

I use a 6128 at home but an IBM clone at work. On the latter we have software that costs about 100 times that of CPC software. You may well wonder what the software vendors do to protect such valuable and costly products from being ripped off. Let me tell you.

DBase3+ sells for £684.25 by the Amstrad User Club to non-members. We have it on our PC compatible at work. It is totally unprotected.

Have I ripped it off? Have I ripped off *SuperCalc 4* or *WordStar* which we have as well and are also unprotected? Not only has no-one else had a copy of these programs, but the version 1.1 update we received some 9 months ago (for *DBase3+*) is not even loaded on our machine let alone other people's!

If it's OK for £600 products, why isn't it OK for £1.99 cassettes?
J Fairlie
Bristol

The £600 package you refer to does have copy-protection, in the form of the 600 page manual that you need to work out how to use it. In fact, the main reason disk protection was dropped was because users threatened to sue producers if their key disks failed and they were unable to access their £10,000,000's worth of data.

In any case, with DBase3 and many other packages, when you first load the package you're requested for a name and address; and each disk has a unique registration number, which in theory could be traced back to the original if it is copied.

The fact is, you're not really comparing like with like. The market, the machines and the users of PC's are all totally different from CPC users.

Using your argument, you could also enquire why CPC games don't cost £20 and more, as they do for the PC; and why you can buy a first-class word processor for the CPC for less than the VAT on a wp package for the PC!



Sugarman by Sarkar

HOT TIPS

The hottest of the hot, from PAT McDONALD

Clanking disk drives

Having just read Stephen Godrich's letter in *AA36*, I would like to offer a few words of advice to him and any others with the same problem.

If you separate the keyboard by taking out all the screws in the back and the two in the side and then carefully lift the two pieces apart, you'll see the disk drive mechanism. On this you will see the arm which rotates out and in to read the disk. The problem is that this arm has rotated too far in and can no longer reach the disk, thus the clicking noise.

All you have to do is, using a small screwdriver, manually rotate this arm a few turns. There is a small screw on the arm, which can be used to rotate the arm. Once adjusted correctly, carefully reassemble the two pieces of keyboard making sure that the plastic ribbon connector has not fallen out from the base to the top – if it has it merely pushes back in. Replace all the screws and the disk drive should now work.

This has happened to me three times in the two years I have had my 6128, and it has even happened to a friend who has a 664 plus disk drive. Is it a common fault?

I hope I've saved a few pennies for those who would otherwise have taken their computer back to an expensive repair shop.

K Greener, Chester le Street

DIZZY

Disk owners who have backed up the *AA37* tape! For the files on a disk, type the following:–

```
MEMORY &3FFF
LOAD "CODE2.BIN"
MEMORY &9B00
CALL &9BF5
NEW
```

Now, you have 39680 or so bytes of free memory to program with, and the added advantage of interrupt driven music! Type:–

```
CALL &9BF5 (stops music)
CALL &9BF5,1 (tune one on)
CALL &9BF5,1,2 (tune two on)
```

As the music plays under interrupt it won't affect your programming: so how about that for fun!

Niall Brady, Sligo

Nice one Niall. But do remember readers, that the program is copyrighted to the Oliver twins. So don't try palming it off as your own work: it'll only end in tears, prosecution, conviction and lifetime imprisonment.

£20 anyone?

We welcome contributions to *Hot Tips*, and the best published each month earn their author £20. So what are you waiting for?

Address your work to:
***Hot Tips, AA*, 4 Queen St, Bath, Avon, BA1 1EJ**

More

On typing in Phillip Tate's solitaire game (*Typeins AA39*) I found that the last few lines of Basic was still showing on the screen after loading it in. I don't know if anyone else has had this happen as well, but after a bit of experimenting I discovered that you can clear it off the screen by adding to line 810, changing the CLS to CLS#1.

J W Boxall, Peterborough

Character-building and time saving

I was disappointed to find errors in the code for the Real Time Clock and New Character Sets (just the things for my all singing and dancing WYSIWIG word processor) in the birthday issue.

First the New Character Set wouldn't work at all, so out with the disassembler. I found three RST 08 calls to location 1400 in the lower ROM – the routine which prints characters to the screen. Now I have a 664 (yes, some people did buy them), which has Basic 1.1. For my machine the location of this routine is 13FA. So for all those 664 and 6128 owners, change all 00, 94 pairs in the listing to FA, 93.

The checksums need to be changed to:

```
140 DATA 21,FA,93,22,5B,BB,C9,3E,20,CD,A5,BB,01
    ,08,03,7E,CB,3F,A6,77,08EB
150 DATA 23,0B,78,B1,C2,37,90,C9,FE,7F,F2,4C,90,CF
    ,FA,93,C5,D5,E5,CD,0C9C
160 DATA 00,CD,78,BB,7C,FE,01,3E,0A,CC,51,91,E1,D1
    ,C1,F1,C9,CF,FA,93,0BFA
```

Direct calling of routines in the ROMs is a big naughty. One should make copies of the actual machine jump blocks. Then the 464/664/6128 ROM changes do not cause problems.

Secondly, the Real TIme Clock resets the machine at midnight and jumps forward seven minutes at every hour. So for all those Cinderellas who don't wish to be caught out I have made the following changes:

```
230 DATA 9C3CFE18CC538032429C3E07CD5AF
240 DATA 5ABB3E00C93E00C93E06CD1EBB50D
```

I was pleasantly surprised to find this routine keeps good time in spite of many disk accesses.

Simon Kidd, Malvern

Many thanks to all those who sent in corrections to the Real Time Clock.. This one was presented purely on terms of content but I'm sure that there's hundreds of CPC experts out there.

£20

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AA CHRISTMAS

The one you don't have to write away for! In our special festive extravaganza we have a special, unique *TOTAL ECLIPSE TRAINER* from Incentive, together with a whole host of other goodies: *Isotopes*, a brilliant complete game; an art package; disk and reviews archivers – and *Gibberish!* Read on...

ISOTOPES

● **Jeremy Fox-Geen**

Radioactive waste: dump it or recycle it, you just can't love it. In this game, you must guide a robot round the screen, whose job description reads 'isotopes eater'. He goes round quite happily, making the enviroment safer. Pity those rocks get in the way: they make a right mess of its digestive system.



▲ Isotopes, radioactive waste zapper

Also, as the robot eats waste, it tends to mutate. To be precise, it grows. And making the robot try and eat itself is bad, bad news.

It's hard to say exactly what makes this program so good: it could be the graphics, which are multicoloured. Might be the speed, which can be varied from arcade ace down to editor level. Have fun playing it, and don't go off the edge of the screen – you'll be terminated for dereliction of duty.

Controls

Z = Left	X = Right
+ = Up	? =Down

Change speed and instructions are at the beginning.

Solar System

● **Graeme Porteous, Glasgow**

Graeme is a student, and wrote a huge program for his degree. He chopped a bit out, smartened it up and sent it in. It draws the orbits and positions of the planets in our solar system, for a given time, down to the last hour and minute.

The program starts with the terrestrial or inner planets. These are all fairly close to the sun, and the positions change relatively fast. On the outer planets, the orbits are relatively larger, and planets go much slower.

This is a very educational program, teaching a lot of facts about the solar system. Which planet has a strange orbit? Which goes backwards relative to the others? Look at the program and have the situation demonstrated. 128K owners, if they load Bankman first, can flick between the two map scales.

Disk Library System

● **Jeremy Longley, Tonbridge**

Tired of searching through endless piles of disks for just one program? Do you feel too lazy to stick all the filenames in a database, one at a time? Read on.

This excellent program makes keeping track of your disk collection very simple indeed. All you have to do is, log in your disks, one side at a time. The program reads the directory in, and makes a list of all the programs, and which disk they're on.

Each disk side must be named in some way, but that's no hardship. Searching for a program name is easy, and the system even understands the * and ? wildcards. When you update a disk, re-logging in is no problem at all. This program really does make short work of bringing order out of chaos. And it's menu driven as well, so there's no long list of commands to learn.

Perspective Art

● **Gavin Barry/Alan Brunyee**

Art programs generally are not very good at creating perspective. This is the illusion of objects receding into the distance, in the correct proportion so as to look realistic.

Perspective art is a clearcut program that lets you create line drawings in mode 1. It isn't up to much on its own, but when combined with another mode 1 art package you can come up with some very life like graphics.

If you have a 464, then ditch line 310 of the program. Otherwise take out the apostrophe at the beginning of the line to allow that part of the program to work – it uses the FILL command of the 664/6128.

The bad news: this program requires a joystick.

The good news: if you have a joystick, it's pretty easy to use.

Controls

P+number	change background colour
I+number	change ink colour
A+number	change alternate ink colour
B+number	change border colour
CTRL-C	clear screen
M+1	select new vanishing point
M+2	Perspective draw to vaishing point
M+3	draw lines
S	save
L	load
F	Fill (6128/664 only)
X	XOR mode on/off
R	draw radial to vanishing point

Reviews

● **Frank Martin, Dublin**

A short and sweet database program, for one application only: keeping track of *AA* reviews. You know all those indices and lists of cheats, reviews etc? Well, now you can create your own.

Type in the relevant *AA* rating, page number and issue, and any comments that you think are relevant. Looking items up is easy, and the program can store about 200 reviews: that's a year's worth of *Amstrad Action*. Not bad for a 3K program.

Gibberish

● **Robert Eadie, Wedmore**

Displays randomized sentences, with various combinations of nouns, verbs and adjectives. Gibberish works almost automatically. Simply press a key, and a new selection of nonsensical sentences will be displayed. It's great fun – and useless!

Encore!

Now's your chance to see what makes a great *Type-In*. Two of the programs on the tape – *Gibberish* and *Solar System* – are also in *Type-Ins* this month.

COVER CASSETTE

TOTAL ECLIPSE TRAINER

FREESCAPE FROM INCENTIVE SOFTWARE

At *AA* we believe in bringing you the really great games. So here's a unique opportunity to look at the biggest innovation in games software during 1988 – *Freescape.*

Exploring a *Freescape* world is like no other game: now here's your chance...

▲ Ray's a curse

You start the game in the 1930's, having landed your plane next to a previously unexplored ancient pyramid. Such tombs are sources of great wealth, and naturally you'd like a nose round. Problem is, there's a curse. An ancient curse. At the top of the pyramid is a temple. Anything blocking the suns' rays to the temple will be annihilated. And within two hours, the moon will eclipse the sun, be smashed into pieces and shower the surface of planet Earth with meteorites, ending civilisation as we know it. Only you can save the day.


▲ There's gold in that there chest

But be warned. The time limit is two hours real time, and if you're going to succeed you need to know what you're doing.

▲ Go for gold

That's where the *Total Eclipse Trainer* comes in, providing you with a golden opportunity to explore *Freescape* and the pyramid. Your training mission: collect six treasures. Simple, eh? Well, no, actually.

Be warned, the traps that have guarded the tomb for all those years are still active, just waiting for you to put a foot wrong. So be careful, and keep looking around. Help is at hand, in the form of an ankh, the Egyptian symbol of life. The ankh isn't difficult to find, if you have an open mind.

▲ Help, mummy!

The mummies, traps and so on spit an ancient poison, which increases your heart rate. If your heart beats too fast, you get heart failure. There are two ways to alleviate this condition: first by resting (but that uses up valuable time) and secondly by keeping your water canteen topped up, to avoid dehydration. But that means finding troughs of water.

Falling increases your heart rate. Keep an eye on your compass if you get lost: it's a lifesaver. Finally, do keep an eye on the time – you haven't got all day you know!


▲Striding around, looking for a fast buck

Controls

Forward	O	Look up	P
Back	K	Face forward	F
Left	Q	Height change	H
Right	W	▲ *Stand/crouch – if crouching, speed is halved.*	
▲ *These keys also move sights if gun is drawn)*		Interrupt game	I
▲ *Joystick works too*		Rest	R
Look down	L	▲ *Shelter needed – calms the heart*	
▲ *Look before you leap!*			

Draw/Replace gun	SPACEBAR
Speed Change	S (Slow, medium, fast)
Angle Change	A (Small, medium, large)
U turn	U

Mechanics

To load the *Total Eclipse Trainer*, type RUN". (Disk owners type |TAPE first.) Then press another key when it's loaded.

The game backs itself up if you indicate. If you want a tape backup, no further commands are necessary, except for replying Y to the question, 'Do you want to save? Disk copies?' Type |TAPE.IN rather than |TAPE at the beginning of the operation.

This is easy enough, but it means you're stuck with that irritating query every time you load the *Trainer.*

To get rid of it, delete line 20 from the loader program TEDEM.BAS.

Don't forget to re-save the TEDEM.BAS program after you've changed it!

PROBLEMS?

If your tape won't load (rare but it does happen) return it to the duplicators, who guarantee to replace it for you:
***Duff AA cover tapes,* Spool Ltd, Unit 30, Deeside Industrial Park, Deeside, Clywd, CH5 2NU.**

DISK TRANSFER

Simply type RUN"ONDISK. The ONDISK program (courtesy of Gary) is the last program on side B, so fast forward it to about half way to save time. Once the program has run, rewind the tape to the beginning of side B. ONDISK will back up the programs, one at a time. This takes about six minutes and the utilities and help file occupy 39K of a disk.

Finally, I'll give last what I should have given first. To run the help file, type (|TAPE if disk owner) RUN" <RETURN>.

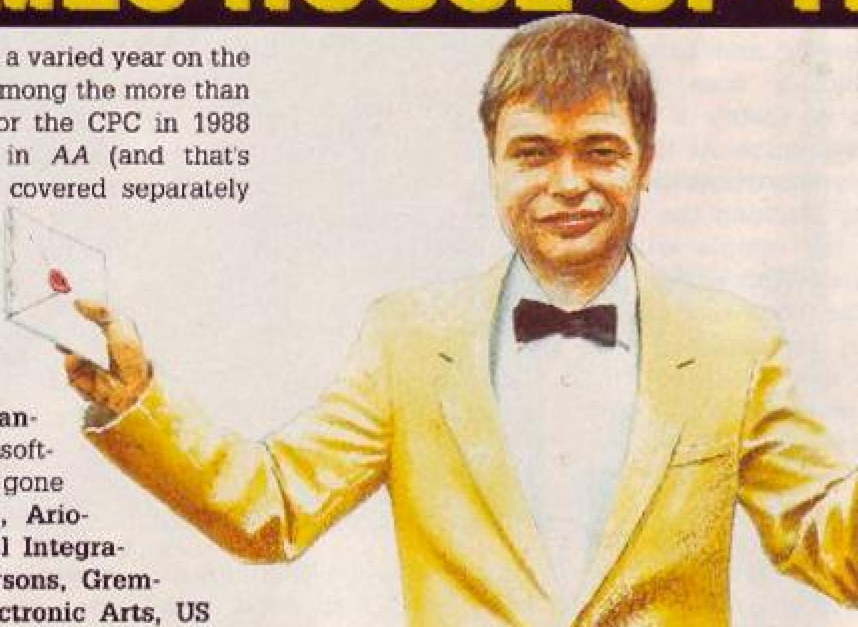
Then, to run each program in turn, reset the machine and repeat the procedure.

THE AA GAMES AWARDS

☆ 1988 ☆

A hushed and expectant crowd gathers at *Amstrad Action* Towers to await the results of the 1988 awards. What was the game of the year? Who lived up (and down) to expectations? Who exceeded them? The tension is mounting, as compere Steve 'Mr Sincerity' Carey steps forward nervously to tear open the gold envelopes and mispronounce the winners' names...

GAMES HOUSE OF THE YEAR



As ever it's been a varied year on the games front. Among the more than 170 releases for the CPC in 1988 that we've reviewed in *AA* (and that's excluding adventures, covered separately in *The Pilgrim*) there's been startling originality and stultifying banality in about equal measure. Software houses have come (**Mandarin, Dinamic**) and software houses have gone (**Powerhouse, Piranha, Ariolasoft**), but the **Digital Integrations, Rainbirds, Hewsons, Gremlins, Microproses, Electronic Arts, US Golds, Mediagenics** and **Oceans** of this world go effortlessly on, coining it. Anyone who doubts the money still being made only has to attend a PC Show, where vulgar ostentation continues to be the rule rather than the exception. And it remains the case that the biggest rewards don't always go to those who produce the best work.

Still, that's not to say that innovation, hard work and sheer originality doesn't pay dividends. One of the best of the big players, **Electronic Arts**, had a gem of a year, with *Articfox*, *Bard's Tale* and *PHM Pegasus* as three straight *Raves/Mastergames* in a row. It's a measure of their achievement that *The Train* could be considered a disappointment. For anyone else it would have been a triumph.

Stupid and offensive

As you can see from our comprehensive breakdown over the page of who did what in '88 and how well, other mere mortal houses could only proceed, it seemed, on a less certain path. **US Gold**, to take one example, released an astonishing 20 titles (some admittedly compilations) and had a rollercoaster twelve months, beginning with a respectable conversion of the arcade hit *720* and the much improved sequel *Gauntlet II* in January, the iffy *Rygar*, *Bedlam* and *California Games*, and the wretched *Out Run* and *Rolling Thunder* in the spring. Summer saw credibility return with *Bad Cat* and *Impossible Mission II*, only to take a severe dent once more courtesy of *Shackled* and the appalling *Psycho Pigs*, memorable only for a stupid and offensive advert that aimed to stir up some controversy and aroused only contempt. Then, from nowhere it seems, springs *Heroes of the Lance*, a strong candidate for game of the year and one that held up production seriously here at *AA* Towers while Gary battled to seize the disks of Mishakal (he did it too – eventually!). So graphics weren't its strong point, but what a game!

Heckle and jibe

The same Jekyll and Hyde story could be told of **Gremlin**. *Masters of the Universe*, *Tour de Force* and *Blood Valley* all lost friends: *Venom Strikes Back*, *Blood Brothers*, *Night Raider* and the very accomplished and much-loved *Mickey Mouse* (which lost out in some quarters because macho male critics were afraid to be thought sissies) won many of them back. *MM* was, against the odds, the tie-in game of the year on the CPC.

Ocean – whose *Gryzor*, *Matchday II* and *Platoon* (never mind the ideology, feel the joystick) were all deserved smash hits – had a great year, marred only by the fortunately forgettable *Madballs*. And **Firebird** too did well, with some thirteen releases, of which the highly enjoyable *Bubble Bobble*, the *Druid* sequel *Enlightenment* and the wonderful looking *Savage* were notable successes, and only the **Silverbird** *Stunt Bike Simulator* failed to impress.

In the budget department the Darlings continued the **Codemasters** 'believe it or not' rise, featuring on *AA's* September front cover (in a spectacularly awful photo, it must be admitted), and even making it to Network Seven. Their work may not be as sophisticated as some, but they must be doing something right. And it has to be admitted that **Codemasters** more than anyone demonstrate the dangers of the reviewing system: we all hated *Fruit Machine Simulator*, but enough of you disagreed to make it a big, big hit. (It would make a change, by the way, to see one or two intelligent and articulate letters on the game reviewing debate.) If anyone at *AA*, though, sees another 'cute' picture of eight month old Willie and four day old Wanda getting high scores in *Ninja Nappywetting Simulator* we'll be sick, we just know we will.

And so to the awards. Our table of software houses' performances for the year (which you can see in full over the page) has been compiled on a percentage basis – i.e., the average score achieved in *AA* games review verdicts. Admittedly this does tend to penalise houses who produce a whole host of crackers spoiled by just the

Christmas Competition! See page 32

occasional turkey, but on the other hand we're getting heartily sick of seeing you, the games buying public, ripped off. We won't stand for it! (And another thing we won't do, incidentally, is soft-pedal: if we detest something, we'll say so, and hang the consequences!)



The list is more or less self-explanatory, and can swiftly be reduced by subtracting those who released fewer than, say, three games during the year. (It's notable that almost thirty houses had only one or two games out during the past year.) Of those who remain, the top seven places are taken by **Electronic Arts, Hewson, Imagine, Incentive** (a special case) **Microprose, Digital Integration** and **Ocean**.

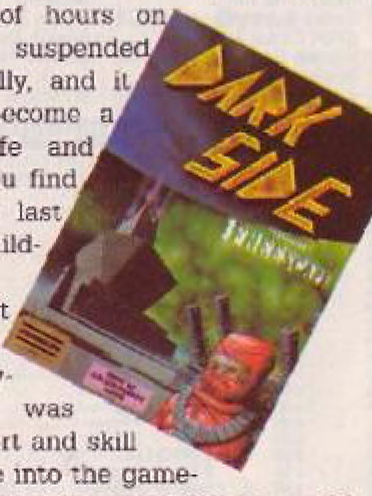
Electronic Arts and **Ocean** we've already discussed, but what about **Hewson?** They produced a whole string of consistently excellent games – most notably *Cybernoids I & II* and *Nebulus*, *Mastergames* all. To have the entirely respectable *Marauder* and *Uridium* as your lowest-rated games is no mean feat.

Imagine too have succeeded in winning a name for themselves as producers of quality, with *Vindicator* and the gruesome *Target Renegade* both impressive in their very different ways.



Microprose and **Digital Integration** both continue to excite and impress, with *Gunship* from the former and the two *Mastergames Bobsleigh* and *ATF* from the latter particularly good efforts.

What a year for Ian Andrew and Co! Last Christmas (OK so that was 1987, who's counting?) *Driller* appeared to the kind of reviews most games houses would blush to write for themselves. What attracted most attention, of course, was 'Freescape', the 3D technique which was 'the nearest thing to being there'. After you'd spent a couple of hours on Mitral you suspended disbelief totally, and it seemed to become a matter of life and death that you find those elusive last few gas build-ups.



But what should not escape anyone's notice was the sheer effort and skill that had gone into the gameplay itself. Here was something you could really get your teeth into straight away – none of this having to die a hundred deaths before you could work out what the hell was going on!

Summer saw the sequel, *Dark Side*, which was everything *Driller* had been and more. This time round the appalling time constraints were enough to panic the most hardened of players.

And now it's *Total Eclipse* time. We have a full and comprehensive review in *Action Test*, and of course the exclusive demo on our fabulous seasonal cover tape, but it's worth noticing here that **Incentive** have quite literally come down to Earth – Egypt, to be precise. Andrew himself has likened the game to 'something like Indiana Jones in *The Temple of Doom*', and you can see what he means. Furthermore the increased number of locations and the improvement in speed of movement combine to provide something that's potentially even more gripping than its two predecessors. So **Incentive** can congratulate themselves on such a fine performance.

But in first place, for a string of intelligent, attractive and well-presented games that make a release from this company always something to look forward to, the *AA* award for games house of the year goes to **Electronic Arts**. *The Bard's Tale* comes agonisingly close to being game of the year, and *Arcticfox*, *PHM Pegasus* and *The Train* are all *Raves* **EA** can be well proud of, and which guarantee value for money. In the coming months we can expect *Skate or Die*, *Ferrari Formula One* and *Chuck Yeager's Advanced Flight Trainer*. As anyone with a PC will tell you, *Chuck Yeager* is a superb game, and well worth looking forward to.



Long may their joystick fire! ●

Desert island disks

Eventually, after much argument and the occasional tantrum, we came up with our list of ten totally wicked favourites of the year. We agreed on nine games, and played tug of war over the tenth. We don't make any pretence of objectivity, and if you disagree – well, tough!

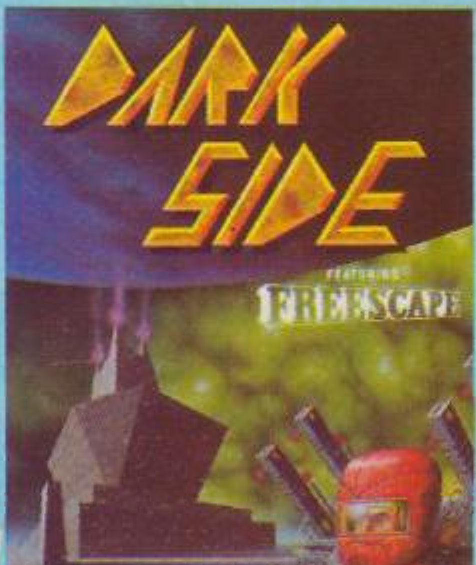
- Advanced Tactical Fighter
- Bard's Tale
- Bubble Bobble
- Cybernoid *or* Cybernoid II
- Driller *or* Dark Side
- Matchday II
- Mickey Mouse
- Nebulus
- Pirates (if you can afford it)
- Target Renegade

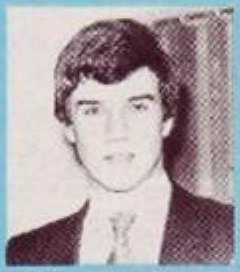


Game of the year is...

DARK SIDE!

Set on Evath's other moon, Tripuscid, the sequel to *Driller* achieved what many thought was impossible by improving on it while continuing to use 'Freescape'. Incentive's task was to take what was no longer so startlingly original and use it to create something that was even better. They succeeded.





▲ Ian Andrew: 'speechless'

For one thing the time-limit this time round was sickeningly tight, and few of us who played *Dark Side* will readily forget the rising panic as that timer crept ever upward. *'Driller* was good', Gary's Verdict concluded, 'but *Dark Side* is even better because of the more logical problems and tighter time limit'. So step forward Ian Andrew and the Incentive crew and accept your reward...

Who did what in '88

House	releases reviewed	average rating%	House	releases reviewed	average rating%
Activision	7	59	Infogrames	7	58
Addictive	1	72	Konami	1	51
Americana	1	40	Leisure Genius	1	63
Ariolasoft	1	76	Loriciels	5	67
Audiogenic	1	81	McQuoid	1	64
CDS	1	82	Mad X	4	44
CRL	3	40	Magic Bytes	1	58
Code Masters	6	53	Martech	1	65
Capcom	1	72	Mastertronic	2	57
Databytes	2	75	Microprose	3	80
Digital Integration	2	92	Mirrorsoft	2	66
Dinamic	1	69	Ocean	7	73
Domark	6	57	Palace	1	81
Electronic Arts	4	84	Piranha	2	64
Electric Dreams	4	57	Powerhous	1	66
Elite	5	71	Rack It	1	54
Endurance	1	63	Reaktor	1	77
Firebird	13	60	Skyslip	1	36
Go	6	52	Superior	1	83
Grand Slam	5	56	System 3	1	68
Gremlin	17	60	Titus	2	59
Hewson	6	81	US Gold	20	61
Imagine	6	81	Virgin	2	62
Imageworks	1	83	Zeppelin	1	45
Incentive	2	94			

Raves of 1988

Arcticfox – Electronic Arts
Arkanoid II, Revenge of Doh – Imagine
Bubble Bobble – Firebird
By Fair Means or Foul – Superior
Captain Blood – Infogrames
Enlightenment Druid II – Firebird
Fernandez Must Die – Imageworks
Get Dexter II – Infogrames/Ere
Gryzor – Ocean
Gunship – Microprose
Impact – Audiogenic
Impossible Mission II – US Gold
Live and Let Die – Domark
Matchday II – Ocean
Mickey Mouse – Gremlin
PHM Pegasus – Electronic Arts
Platoon – Ocean
Savage – Firebird
Sorcerer Lord – PSS
Spy v s. Spy trilogy – Databytes
Stifflip & Co – Palace
Train – Electronic Arts
Venom Strikes Back – Gremlin
Vindicator – Imagine

THE YEAR'S *MASTERGAMES*

➤ **January – *Driller***
Incentive's superbly innovative 'Freescape' epic

➤ **February – *Bobsleigh***
Digital Integration's wonderful snow business

➤ **March – *Deflektor***
Vortex/Gremlin addictive 60 level 'cell-out'

➤ **April – *Advanced Tactical Fighter***
Digital Integration flying high again!

➤ **May – *Cybernoid***
Hewson and programmer Cecco strike gold

➤ **June – *Nebulus***
Hewson/Gremlin fiendish Pogo demolition job

➤ **July – *Dark Side***
Incentive are back to top *Driller*

➤ **August – *Target Renegade***
Imagine's vigilante violence

➤ **September – *The Bard's Tale***
Electronic Arts go for the role-playing vote

➤ **October – *Heroes of the Lance***
US Gold's complex and engrossing AD&D'er

➤ **November – no award**
If only *The Train* hadn't run out of steam!

➤ **December – *Cybernoid II***
Hewson and Cecco get set to have themselves a merry little Christmas

1989 here we come!

So that was 1988. But what about the year ahead? STEVE CAREY gets the low-down from those in the know

For most of us, the turning of the year offers a natural break, the ideal opportunity to consider what the future will hold. It's a time for New Year's resolutions to be made (lose some of that Christmas weight; spend less than you earn; get somewhere with *The Hunt for Red October*), and a time for New Year's resolutions to be broken.

Well, it's not that different for software houses. They too make promises they know they haven't a hope of keeping, in the shape of release dates that at present are no more than half a dozen half-finished action sequences and some artwork. Still, what they *tell* us they're doing is the closest we're going to get for the time being to what they actually *are* doing, so here goes...

Coining it

For US GOLD, the CAPCOM string of coin-op licences continues with *Led Storm*, a futuristic driving combat game featuring 'laser enhanced destruction powers'. Hot on its heels comes *Black Tiger*, which pits you against three fearsome dragons in a five-level subterranean eight-directional scroller. Later on we're promised *Forgotten World*, about which little is known (even by US GOLD, we suspect): 'its most impressive feature', we discover, 'is the frightening pace of the action speed as the game hots up'. Roughly translated, this means, 'We haven't got even the faintest of ideas what it's about. Why don't you go away and ask someone else your damn fool questions?'

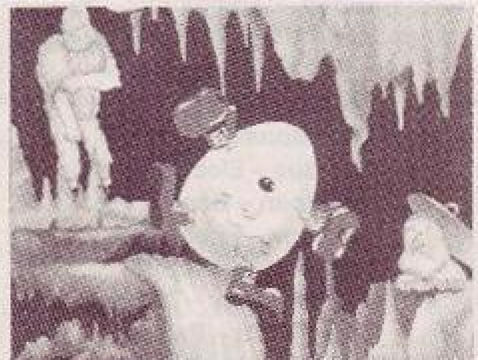
Commendably hazy

DIGITAL INTEGRATION'S Rod Swift reveals that they are releasing *F16 Combat Fighter* on the Amstrad, and is commendably hazy about release dates: 'probably in the second quarter of '89', is all he will commit himself to. 'It's very definitely the next generation over what we've done before as far as complexity and accuracy are concerned'. He is frank, too, about the place of the CPC in DI's plans: 'Of course the 8 bit machines are still important to us, but it has to be said that we've found it a struggle as far as performance, speed and so on are concerned'.'

INCENTIVE'S Ian Andrew, still showing evident signs of relief and jubilation at having completed *Total Eclipse*, is understandably cagy about future commitments: 'We'll probably be doing just two games for the CPC, as we did in '88. We'll definitely be supporting the CPC, naturally in *Freescape* or an enhanced version of it. We're constantly updating it and adding to it, so that we get better and better each time.' More than this he was unwilling to say.

It promises to be an interesting twelve months at CODEMASTERS, where they've just released their first full-price game (*Four Soccer Simulators*, reviewed on page 61 this issue) and thus at a stroke opened up a whole new future. At the same time they're moving up their budget price from £1.99 to £2.99 and aiming more titles at 'the lower end of the full-price market'.

There are said to be a number of *Dizzy* spin-offs, sequels and follow-ons in the pipeline. Look out in the months to come for *Treasure Island Dizzy*, *Dizzy Goes to Hollywood*, and a sequel to *Gone with the Wind* entitled *Dizzy: Back Again with the Wind*. The blame should be laid squarely with those people who, claim Codemasters, inundate their HQ with fan-mail for the little chappie. Needless to say there are more



▲Dizzy: about to spawn a host of sequels. Can nothing be done to protect the nation's youth from this dire threat?

Violence to come

HEWSON appear to have a violent year in prospect. Look at these:

- *Eliminator*. Expected January '89. By John Phillips (of *Nebulus* renown) and converted for CPC by John Wildsmith. 'Hammer down the highway', you're instructed, 'spin to the ceiling, flip across the floor in this electrifying, death-defying blood arising action game'. Phew! If the game matches the advance publicity then
  a) it'll be the first time any game by anyone does; and
  b) it'll be mega!
- *Stormlord*. Due February. From the quality pinkies of Raffaele Cecco, of *Cybernoids I & II* and *Exolon* fame. The scenario involves a mission to free the captured and defend the peace and tranquility of your realm (peace? tranquility? what kind of game is this?). You must repel the evil Queen, or else (that's more like it!)...
- *Kalashnikov* – announced for June. The new Chris Hinsley ST game gets a CPC conversion. You're the guardian of an alien death chamber protecting the nuclear-charged tobs from energy consuming parasites. Don't expect to see this game released though – the name's being changed soon (cold war thaw?).
- And finally, *Astaroth*, a conversion of Marc Dawson's new ST game, in which you aid Ozymandias (any relation to Ozzy Osbourne?), the fearless brigand, make his way through the labyrinthine crypt filled with treasures both precious and magical, using mind-power and magic to destroy Astaroth, Angel of Death, and her evil minions.



▲ Andrew Hewson of that Ilk: threatening violence!

simulators in the pipeline: about 439 at last count. And long term there are plans to develop the role-playing game market, beginning with an Amstrad conversion now under development (doesn't take very much, truth be told) for the Commodore 64 *Superdragon Slayer.*

It's too early to tell yet, but it is going to take a great deal to convince the 12-to-14 year old boys, who traditionally have been their strongest market, to find a tenner for a Codemasters title. And no-one is going to be easy on the Darlings at that price!

Still, their 'firm commitment to the CPC' is to be applauded, and it would be nice if it could imitated. 'We find the Amstrad serves us well', says Managing Director David Darling, 'and we intend to continue working on it throughout the year ahead'.

Chuck: up in the air

ELECTRONIC ARTS have some mouth-watering prospects in the offing. Coming almost before you know it is *Skate or Die*, which offers five skateboarding events: Ramp Freestyle, Downhill Race, Ramp Hill Jump, Pool Jousting and Inner City Downhill Battle – in which you compete against computer opponents Poseur Pete, Aggro Eddie and, toughest of all, Lester.



▲ Chuck Yeager in person: 'The guys at EA', he says, 'have taken the terror factor out of test piloting and made it fun for everybody'

Hot on the heels of the skateboard, *Chuck Yeager's Advanced Flight Trainer* will be taking off. General Yeager was the man who broke the sound barrier, and he helped artist Ned Lerner in designing the game, which has already been an enormous hit on the PC.

The game 'includes 14 different aircraft from Spitfire to Experimental Jets, and features three levels of onscreen instructions from Chuck'. The first teaches basic flying skills, the second goes on to advanced manoeuvres like 'aileron rolls and hammerhead stalls' (haven't got the foggiest what they are, but they sound pretty stomach-churning to me). By the third and final level the player is learning aerobatic stunts and is ready to use the Formation Flying feature while still keeping lunch down.

The problem EA face is living up to recent releases and matching expectation with achievement. Still, you can do it, can't you guys?

Later on in '89 from EA we can expect *Chainsaw Warrior*, the licence of the Games Workshop solo role-playing game. It's an arcade action game originated in the UK by Equinox and featuring a central character who's apparently something of a cross between Rambo and the bionic man. Mission: save the world from killer zombies in an hour or less. Finally, *Ferrari Formula One* is a grand prix racing simulation of the 1986 season featuring some 16 tracks. The rest you can more or less work out for yourself.

Hairy arm syndrome

AGAIN AGAIN promise *The Munsters, Operation Hormuz, Gilbert* (yes, the 'hilarious alien' – well, one out of two ain't bad – from Tyne Tees TV) and Durell's *Saboteur III.*

ALTERNATIVE have a whole pile of titles coming at you, ranging from *Postman Pat* – their first budget licence – to *Graham Gooch* by way of *Oink, The Double, Mini Office, Academy (aka Tau Ceti II)* and the stomach churning *Slug.*

Over at MARTECH Managing Director either has something very special up his sleeve, or in fact nothing more than a hairy arm. He flatly refused to part with any information, and would only say: 'We have some exciting products in the pipeline, the very nature of which does mean that we can't release information until well into the New Year. But I'm sure people will sit up and take notice – especially you Amstrad users!' (He added that last bit just to show off that he knew who *Amstrad Action* was.)

ACTIVISION'S plans include a host of licences, though details are sketchy. They include Sega's *Time Scanner, Galaxy Force, Sonic Boom, Altered Beast, Hot Rod, Ace Attacker* and from 20th Century Fox *Die Hard.* The arrival of new boys John Twiddy *(Ikari Warriors, Last Ninja)*, Hugh Riley and Mev Dinc *(Last Ninja II)*, operating as Vivid Images Ltd, should also help. Vice-President of Activision Europe Rod Cousens told *AA* that the signing is evidence that 'we are continuing to attract and invest in new talent, which in turn strengthens our position in the industry'.

In addition to Schwarzenegger vehicle licence *The Running Man*, GRANDSLAM have secured the computer game rights to *Thunderbirds*, one of those TV programmes it's inexplicably becoming cool to know all about – though older readers will remember just how naff it



▲ The Munsters are back: coming soon from Again Again

was once considered. Naturally it features all the crew: the Traceys, Virgil, Brains, Lady Penelope and her driver Parker.

Another mass youth appeal licence Grandslam have outbid the competition for is *The Dandy*, featuring Smasher, Korky the Cat and the editor's personal favourite, Desperate Dan. Those of you brought up on *Viz* may find it all a little quaint and innocent, but for the nostalgia kick *The Dandy* is potentially *the* capture of '89. Eagerly awaited.

Not quite so eagerly awaited is Grandslam's fourth acquisition, *The Saint and Greavsie*, who are to computers what Les Dawson is to fashion design. Undaunted, Stephen Hall of Grandslam boasts that these four titles 'are a continuation of the growth and strength of Grandslam in 1989'. But what about the CPC? 'Obviously these titles will be available for cassette and disk, as the Amstrad is still a very strong machine in the marketplace'. And he warns: 'Watch this space – lots more will be released in '89!'

Promises, promises

And, as Barry Norman is supposed to say, there you have it. There appear to be some solid gold prospects in the offing, a few excellent licenses and conversions, and already it looks as if the Turkey awards for 1989 may yet have to be awarded.

A word of warning, however (though it won't be necessary if you've had your CPC longer than about five minutes): remember that writing games is a creative process, and it's notoriously difficult to finish a game according to schedule.

Indeed, the events between the conception of a game and its appearance in the shops can be summed up in a law: the more promising the scenario, the bigger the licence, the more money invested in promotion and the more hyped-up a release is, the less likely is it that it'll appear in time for Christmas. So don't hold your breath! ●

WORDS WORK

Word processing tips with PAT McDONALD

Mini Office II

I have a 6128 with a *Rombo* ROM box, an RS232C interface and a Pace modem. When I run *Mini Office 2* I get the front menu, but when I select any of the facilities the program resets. I have tried turning off some of the ROMs with |ROMOFF, but nothing works. I have to disconnect the peripherals to use *Mini Office 2*.

A J Shears, Sutton

Why not just leave the lid off of the ROM box, flick the dip switches and turn the machine off and on? Actually, I'm a bit surprised, because our Mini Office 2 *works fine with our ROM boxes and modems. Possibly you have an early version, though I can't tell without seeing it: try speaking to those nice people at Database software on ☎0625 878888 for a possible update.*

SPARE TIPS, GUV?

In our computing we all pick up novel solutions, short-cuts and neat ways of doing things. And for every problem you have, there's probably some other *AA* reader who knows the answer. So write now to:

Words Work, Amstrad Action,
Future Publishing, 4 Queen St,
Bath BA1 1EJ

Citizen strikes back

I am writing to you about my use of the Citizen 120D printer with *Protext*. This printer has the notorious double line feed problem.

To overcome this, rather than cut wire 14 or the like, I set the printer control code for @ (which *Protext* always calls before printing anything) to 27 64 27 65 6. Also I have set the codes for k to 27 126 53 49 27 62 for on and 27 35 for off. This enables many interesting characters to be printed, including the Greek alphabet.

The find and replace facilities are much more flexible when you let them prompt you rather than typing everything in directly.

For example, replacing all the 'a's' with 'b's' can be done directly by typing r a b ag and RETURN in edit mode.

If you want to replace any letters or words by nothing or blank spaces, however, it can only be done by typing r, RETURN and following the prompts.

The only bug I can find in *Protext* is its inability to erase files whose filenames begin with a numeral.

Tony Watson, Oswestry

Nice work Tony, and thanks for sharing it.

Xtra Print

Here is the print routine for the* Fantasy Map Designer *in* Type-Ins *this month. To use it, just type in the extra lines to the main program. The printing takes over four hours to run, and gets through reams of paper to create a huge map. If you're a bit surprised at it producing reams of text, there's a good reason: you're supposed to join all the edges together to form one picture four sheets down by eight across.

The program originates in AA22, but seeing as that has sold out I have no qualms about reprinting it. To use it on its own, just type in the whole listing, delete line* 1100 *and type* RENUM 10,10,10. CALL 29000 *sets off the routine.

One final word – the program as set up works for printers that can handle Epson with NLQ: Tom Fiers of Destelbergen sent in some extra lines to cope with Star printers. They are the final group.

```
80 SYMBOL AFTER 32:MEMORY 28999:GOSUB 1095
1095 GOSUB 1110
1100 CALL 29000:RETURN
1110 RESTORE
1120 FOR n=0 TO 259 STEP 10
1130 total=0:FOR x=0 TO 9
1140 READ a$:g=VAL("&"+a$):total=total+g
1150 POKE (29000+n+x),g:NEXT x
1160 READ b$:checksum=VAL("&"+b$)
1170 IF checksum<>total THEN PRINT "Error in data
     in line ";n+1190:END
1180 NEXT n
1190 DATA CD,2E,BD,DA,03,72,06,08,21,23,359
1200 DATA 72,7E,A7,CD,2B,BD,30,FB,23,10,4AA
1210 DATA F6,3E,00,21,46,72,E5,F5,CD,35,4E9
1220 DATA BC,F1,E1,70,23,3C,FE,10,20,F2,57D
1230 DATA 06,10,FD,21,46,72,DD,21,56,72,3B2
1240 DATA 16,00,FD,7E,00,21,2B,72,5F,19,2C7
1250 DATA 7E,DD,77,00,DD,23,FD,23,10,EE,4F0
1260 DATA 21,00,00,22,66,72,21,8F,01,22,1EE
1270 DATA 68,72,11,6A,72,0E,00,06,00,2A,205
1280 DATA 66,72,09,D5,EB,2A,68,72,C5,CD,537
1290 DATA F0,BB,21,56,72,4F,06,00,09,C1,3B3
1300 DATA D1,7E,12,13,0C,79,FE,50,20,E1,448
1310 DATA 3E,0D,12,13,3E,0A,12,06,52,21,143
1320 DATA 6A,72,7E,CD,2B,BD,30,FB,23,10,46D
1330 DATA F7,2A,68,72,2B,7D,FE,FF,C2,97,5F9
1340 DATA 71,7C,FE,FF,C2,97,71,3E,0C,CD,5CB
1350 DATA 2B,BD,30,FB,2A,66,72,11,50,00,376
1360 DATA 19,22,66,72,7D,FE,80,C2,94,71,4D5
1370 DATA 7C,FE,02,C2,94,71,C9,06,13,21,446
1380 DATA 10,72,7E,CD,5A,BB,23,10,F9,C9,4D7
1390 DATA 50,52,49,4E,54,45,52,20,4E,4F,2E1
1400 DATA 54,20,52,45,41,44,59,0D,0A,1B,21B
1410 DATA 51,7F,1B,41,07,1B,6E,40,57,48,29B
1420 DATA 4C,4F,42,35,3F,53,56,49,31,37,2AB
1430 DATA 28,29,21,23,26,2A,3C,3E,3D,2F,1CB
1440 DATA 27,2C,2D,20,00,00,00,00,00,00,0A0
```

Star owners use these last lines instead:

```
1410 DATA 51,7F,1B,41,07,1B,3E,EF,EF,EF,459
1420 DATA EF,EF,EF,E5,E5,E5,E5,E5,E5,E2,90D
1430 DATA E2,E2,E2,E2,E2,E0,E0,E0,E0,E0,8CA
1440 DATA E0,E0,E0,E0,00,00,00,00,00,00,380
```

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DMP 4000	—	—	£4.95	—

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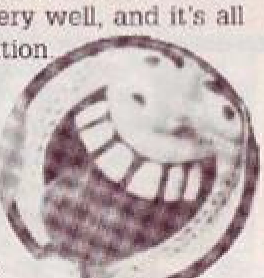
Bootiful they're not. You've seen the best, now try the rest – GARY BARRETT presents the awards no-one wants

Christmas is a time for eating too much, giving and receiving presents and wondering why the *The Sound of The Great Escape of the Wizard of Oz* is on yet again. It's also the time of year when turkeys get worried and run around making gobbling noises in a desperate attempt to lose weight and avoid the chopper for another year.

And while we're talking turkey let's cast a cynical eye over a selection of the worst things that were released, escaped or were just plain thrown out in the last twelve months. Yes folks, it's the awards no-one wants.

After many hours (translation: ten minutes at lunchtime) of heated debate and careful consideration (tossing coins) of everything that came out, fell out or dropped off in 1988 we present the off-colour mixture of games, serious software and a few other titbits that receive the dubious honour of Totally Useless Releases Known Everywhere as Yuk (Turkey).

■ **Outrun** (US Gold, *AA* 30, 37%). Take one highly successful arcade game, put it onto the CPC and what do you get? A truly awful racing game. Not only was it incredibly slow, but it also had some of the most stunningly bad sound effects ever. Unfortunately the game sold very well, and it's all due to its arcade reputation.



■ **Madballs (Ocean *AA* 29, 48%). The only good thing was the packaging. It came with some grotesque stickers of the bouncing balls that inhabited the game, one of which bears a striking resemblance to Bob Wade (RIP) after a late night. The game itself was far too tedious to play for more than five minutes.**

■ **Stunt Bike Simulator** (Silverbird, *AA* 36, 29%). Completing dare-devil stunts on the back of a motorbike – sounds exhilarating, but unfortunately Silverbird's attempt came close to rivalling watching paint dry in the excitement stakes. Not only were there some totally un-awe-inspiriring graphics, but you also got absolute silence to listen to while you were playing.



■ **Street Sports Basketball (pyx, *AA* 36, 44%). Deformed teenage basketball players in abundance in Epyx's basketball game of 1988. The graphics were grotesque and once again you could listen to the hum of your CPC working instead of sound effects.**



■ **Pyscho Pigs** (US Gold, *AA* 36, 28%). The only psycho thing about this little game from US Gold is the person that said 'Yes it's good enough. Release it'. It was a simple game of running around a very boring screen with only the prospect of more boring screens to keep your interest.

■ **Rolling Thunder (US Gold, *AA* 30, 37%). The tradition of bad arcade conversions was upheld by US Gold with a game that had some of the most incredibly badly animated sprites of the year. Definitely not a case of 'It'll be alright on the sprite' (ouch).**



■ **Masters of the Universe** (Gremlin, *AA* 30, 42%). Based on the film of the cartoon series and described by Bob Wade (*AA's* ex-He-Man) as 'Enough to make you buy *Outrun* – well maybe not'. More of a *Disastergame* than *Mastergame*.



■ **Tour de Force (Gremlin, *AA* 31, 20%). Gremlin's lowest rated game of 1988 had many problems, the most obvious being working out which of the identically coloured bikes is yours and which isn't. The best feature of the game was kicking your opponents off their bikes. Perhaps the same should be done to the programmer?**

Lee Enfield go home

Space Ace (*AA* 31, 46%). Tournament of Death (*AA* 31, 29%). Amazon Adventure (*AA* 32, 37%). Infogrames. Although three separate games, they're all part of the tedious Lee Enfield saga and since they're all of the same low quality they deserve grouping together. The last two had small playing areas with lousy animation and the first was just *Prohibition* set on the moon.

This little piggy went into marketing

1988 saw the rise of two completely different marketing ploys. The first of these is the Code Masters 'look, we've taken a grotty photograph' syndrome. Believed to have originated from Bruce Everiss, the marketing manager, this involves taking photographs of no interest whatsoever, and sending them to computer magazines. As the photographs insult no-one and generally have some tasteless message – 'Here's the Oliver twins up a tree', 'Here's some very young Darlings: aren't they Darlings?' – they have a good chance of being published by lazy editors with impending deadlines and small minds.

The flip side is the 'controversial debate' method. Software companies come up with a way to rub someone important up the wrong way, whether it's large colour posters of large-chested girls Maria Whittaker or Corinne Russell stripped to kill, advertising hoardings with topless girls and a sexist slogan, sending particularly bloodthirsty games to the censors to automatically receive an 18 certificate, or including a free *shuriken* that could, in theory if not in practice, cause an injury. These cause a storm of free publicity (frequently getting articles written about them, allowing editors to reprint the offensive pictures while tutting about the sexism of it all). Which of course sells the game – the object of the exercise in the first place. Simple, aren't they?





■ **Geebee Air Rally** (Activision, *AA* 34, 39%). Flying around a course and avoiding other aircraft could have been good, but instead it was dreadful. Flickery graphics and not enough to do were part of its failing. When it crashed it came as a relief.

■ **Plasmatron** (CRL, *AA* 32, 17%). Occasionally a game arrives just so incredibly bad it leaps out at you and says 'smash me into a thousand pieces', and here's one of them. It flickers, it jerks along and makes horrible noises at you. What more could you do without?

■ **Dark Sceptre** (Firebird, *AA* 33, 47%). *Dark Sceptre* had potential to be excellent, and turned out to be decidedly iffy. The design of the game was fine, but unfortunately it turned into a spectator game where you just sat back and watched the action, even if it did appear to be in slow motion.



■ **Bionic Commando** (Go, *AA* 37, 39%). Some games get a little confusing when played on a green screen monitor. This one managed to be so even in colour. Admittedly there were two versions of the game, a colour and mono one, but the colour version was even worse to look at than the mono. Two colours for most of the game hardly stretches the CPC to its limits.

■ **Action Force** (Virgin, *AA* 37, 46%). In the past Virgin have produced other games with long and unavoidable messages that are printed so slowly that even Steve Carey can keep up with them, and the ones in *Action Force* were stunningly dull and slow.

■ **Fruit Machine Simulator** (Code Masters, *AA* 33, 15%). *FSV* currently holds the record for the longest Second Opinion in the history of *AA*. Bob Wade (RIP) was the man responsible and waffled on a lot about state of the art and how much this isn't it. That didn't stop it from reaching number one in the software charts (or Bob playing in for three days).

■ **Personal Excellence Package** – Can you find the real you?' was the full title. PEP was designed to ask all sort of questions in order to reveal information about your intelligence, personality, performance and mental aptitude.

The way in which the program was presented was very good, with a good manual explaining things. Why's it a turkey? Well, it's pretty hard to imagine anyone spending £25 on a program, and using it just the once – using it repeatedly is pretty pointless. And we found that exploring your personality in company with a few friends can prove highly embarrassing.

Of course, getting round a table on New Year's eve and trying to get an IQ of less than 77 could prove a formidable task, as could defending your abilities on tolerance, generosity and politeness.

Amstrad's funny old year part 1

Alan Sugar's decision to do a bundle on the CPC should be highly welcomed: after all, such deals bring down prices quite sharply, with an increase in sales and interest. Usually.

On the other hand it really is hard to imagine many people rushing to spend money on the new deals. These involve a CPC464 or 6128, plus a Clock Radio, tuner for the monitor (so you can use it as a television), computer desk and 17 games. The price is between £299 and £499 – with £100 over the standard list price buying you the bits and pieces. The deal itself contains some very desirable equipment, but the cash incentive to buy is non-existent.

Overpriced, underadvertised and available in limited quantities.



– and part 2



Alan finally did it. Four years after releasing the 464 on a waiting world, he's introducing a replacement.

Just think, this Christmas you could be playing games on a PC200 – a machine with more expensive games, poor colour and sound capabilities to make the tone deaf wince.

One argument is that people can use software from their work at home if they buy a PC200. All very well, but work PCs mainly use 5.25 inch disks, whereas the PC200 uses 3.5 inch. Also, does anyone really enjoy working at home?

Won't the kids be on it perpetually, playing the latest arcade game which they have saved for six months to buy?

Not very likely, is it?

Bah humbug

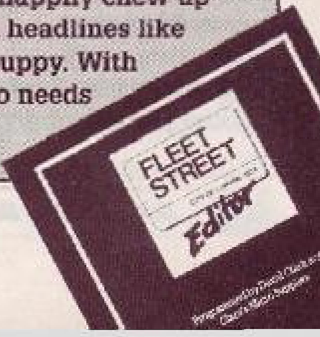
Another new year will soon be upon us and perhaps there won't be any Turkeys next year. We might also have a summer, see Pat touch something electrical without breaking it, contact small alien life forms that want to 'phone home', have no errors in *Cheat Mode* or *Type-ins*, games will be released on time and software houses will actually return our calls. Ah well, here's to 'Talking Turkeys 1989'.

A Grudging Christmas and a Moderately Not Too Miserable New Year from all at *AA*. ●

Fleet St Editor

Definitely DTP package of the year – in the sense that it was the only one. Published by Mirrorsoft, slated by Pat McDonald (in *AA*38), *FSE* was a long time coming (previewed in *AA*4!), and just went to show what a waste of time it is waiting for things to arrive. We had a competition in this office to decide what *FSE* really stood for – but none of the entries can be published, partly for reasons obvious to anyone who has seen *FSE* in action, and partly because we tried to print them in *FSE* and crashed the program.

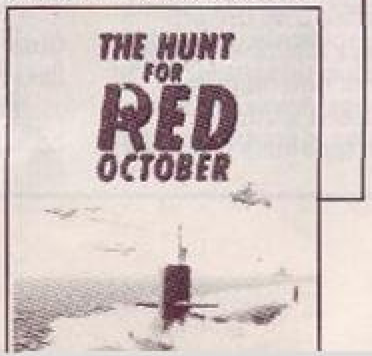
Occupying two disks and accompanied by a manual intended for the beginner and easily able to reduce Pat to tears within in minutes, *FSE* isn't a patch on *Stop Press*. An editor's job is bad enough, what with recalcitrant writers, copy deadlines and stingy publishers without 'aids' such as *FSE* that quite happily chew up neat columns and headlines like some demented puppy. With help like this, who needs hindrances?



Hunt for Red October

(Grand Slam, *AA* 33, 44%) Difficulty levels vary considerably in games and this must hold the record for being one of the toughest.

An average game lasted for about two minutes before you died and the office record is claimed by Pat The Perseverer to be nine minutes and 56 seconds (don't believe it myself, but there you go).



THE GENESIS OF NEMESIS

Nemesis have been selling tape/disk utilities for three years now, and show no signs of fading away. PAT McDONALD talks to main man Colin Harris, reviews some of the Nemesis range and generally makes a nuisance of himself (so what's new?)

In the beginning, Colin Harris was one of many who bought a ZX81 for his computer capers way back in 1981. Impressed by the hobby, if not by the machine, he soon graduated onto the Dragon 32. About the time he set up Nemesis, Dragon folded and the machine became an endangered species. Soon after that the 464 appeared, and his first adventure game software was released about the time that the machine appeared in Dixons.

How long have you been running Nemesis?
"Well, full time... must be about three years. At least. I've earned a crust doing it since I started. I think I've sold around 12000 copies of Bonzo Super Meddler, which probably means around 100000 in use round the country. At a guess, given the way the world is."

And who is Bonzo?
"Bonzo was a kitten who grew into a fourteen pound cat. I had to spend three months indoors with a badly broken ankle, Bonzo, and a computer. During the time I learned machine code. Bonzo dissappeared two years ago, but he's remembered in a sentimental way".

"My private life, before you ask, revolves around my wife and three more cats, called Blitz, Bobby and Tilly. 'I'll even go as far to admit that I'm a professionally trained photographer, but that's all."

Why did you call your company Nemesis?
"Well, it's a bit lateral. Nemesis is the Greek goddess of retribution. I'm a (failed) adventurer, and I wanted to get my own back on those people who produced bad adventure games. The tape-disk aspect is similar, getting your own back on companies... you know, the difference between spending minutes loading a cassette, and 10 seconds loading a game from disk."

It's nothing to do with the price difference between tape and disk games then?
"Er... no."

Why did you produce tape-disk transfers?
"Back in the days when I was producing adventures, I would get some good reviews, place some advertising, and sell a mere handful. One I did had a really marvellous review and a quarter of a page ad. I sold five copies."

"I went back to something I'd been doing on the Dragon called Super Meddler, a general purpose tape/disk. Lots of interest was shown, and I made some money for a change."

> **"When the CPC dies, I shall probably die with it"**

"Don't get me wrong. I'd much rather be a philanthropic adventure writer. They're more fun to write and more entertaining to play. Tape-disk stuff is a bloody hard slog and gives me brainache. But I can make a living at it, which is why I do it."

What sort of after-sales service do you give?
"Well, I realise that the programs aren't infallible. There are plenty of one-off games, ones that need a unique touch. I do tape-disk transfers on an individual basis for these. But I do insist on an original tape or inlay being included with the order."

> **"Four people have been brought to my attention, one of who was so incorrigible he was pirating my stuff too!"**

"Then there's the Bonzo Bulletin, which comes out at irregular intervals. I charge £10 for eight copies, but the entire collection of back issues (all 24) costs £13. The quality's been getting better, and it's packed out with tape-disk transfer methods. Of course, I'm always available on the phone."

Doesn't that place a strain on you?
"Not really, in fact I carry a transportable phone around with me. I don't want to miss anything."

What are your thoughts on piracy?
"Mixed. The vast majority of my customers appear to be honest, regularly getting in touch about transfer problems. The ones who don't talk much, just ask for occasional information and disappear, they can be rogues. When I find out for sure, I throw them off the mailing lists and I don't help again.

'Four people have been brought to my attention, one of who was so incorrigible he was pirating my stuff too! I'm not going to encourage piracy, but there's not a lot I can do about it. I can cut off supplies of updates, but that's about all."

"I suppose I'm too pleasant really. When one company, Pride Utilities, disappeared, another competitor laughed an awful lot. I don't like that. I prefer competition – it keeps you on your toes, stops the market going stagnant."

> **"A lot of people are getting in touch now who've just got 6128's"**

How busy are you during the year?
"In October business was quiet, but now (coming up towards Christmas) it's absolutely crazy again. Mind you, for me August has always been my best sales period – can you believe that? – apart from the lead-up to Christmas. I s'pose it's the kids on holiday."

"There's no drop against this time last year. A lot of people are getting in touch now who've just got 6128's. Okay, so some had 464's but quite a few got their machines new. Alan Sugar's bundling the 6128 with a desk and a chiming alarm clock seems to be working. I find it a bit surprising, myself. Personally I would have thought a price cut or bundling it with a printer would have done the trick, but then I'm not the chairman of Amstrad."

"You know, around 60% of my business is tape-disk transfer. I only cater for the CPC nowadays. I don't touch other machines at all (can't stand the Atari). When the CPC dies, I shall probably die with it."

BONZO SUPER MEDDLER/BLITZ

£12.50 EACH ● NEMESIS ☎ 0933 623967

Tape-disk transfer utilities make up the bulk of Nemesis sales. There are two disks – but the contents overlap somewhat. *Bonzo Super Meddler* is a general purpose disk for simple needs. It has been designed to transfer 'standard' files – files saved using the standard SAVE command – but also has *The Hack Pack*, for games with obscure loaders (such as *Thrust*, which played music while it loaded). Recently companies have been changing loaders, making them more individual and hence more difficult for one utility (such as *Super Meddler*) to deal with. So *Bonzo Blitz* was born.

Bonzo Blitz is a suite of programs for coping with the whole range of flashloaders. This includes a Detect option, which scans through a tape to see what it can analyse. It's not perfect, but it offers you several options you wouldn't otherwise have.

Scanty instructions make using the programs more difficult than it might be, and if you're not au fait with your Amstrad you'll find it tough to understand just what is going on. *Super Meddler* and *Blitz* do, however, have one redeeming feature. They do the job that they're supposed to do, with an excellent chance of backing up most software.

If you are heavily into tape/disk transfers, the Nemesis bulletin might interest you. It's not very pretty, but it contains a wealth of information on more than 700 transfers. Trouble is, they cost: £13 for the entire set 1-24, plus an £10 subscription per eight after that.

Still, if you are concerned about getting all your games onto disk (you hopeless games addict you) then Nemesis is a real alternative to investing in a Romantic Robot *Multiface* 'black box'.

Nemesis still sells software – not because of massive advertising budgets, corporate image or licensing deals. They don't underprice their product, and their presentation and manuals leave a lot to be desired. The reason why Nemesis is so popular is that they supply something that is in demand. People want to back up their games collections to disk. They are prepared to pay a fair old price for this, and put up with less than perfect presentation and so on. Nemesis also offers quality, friendly support for newcomers to the hobby. Its programs work, and work well, and while it's unlikely that they have many friends among games developers and software houses, they have a wide and loyal following among users. Long may they continue!



▲ *Bonzo Blitz* at work

Buster's pal

Inevitably controversy surrounds protection busting programs: once programs are easily copied, they spread like wildfire. It keeps software prices up for those who actually pay for it.

Unfortunately, Nemesis' *Super Meddler/Blitz* falls into this category. The *Blitz* instructions do at least state, 'It is a condition of sale that this program is not used for illegal purposes...'. A pity that the *fact* that *software piracy is illegal* is not included.

The legal aspects of tape/disk transfer are unclear. As far as I am aware, no companies or individuals have yet been prosecuted. There seems to be apathy on the part of the people who could do something about it, but don't.

BONZO'S BIG BATCH

£12.50 DISK ONLY ● NEMESIS ☎ 0933 623967

In the blue corner we have a pools predictor. In the red corner, a screen designer. Refereeing the pair is a database program. Perhaps this is intended as evidence Nemesis can program things other than tape-disk utilities.

The screen designer boasts an inbuilt 'sprite' design program. The problem is, they are static. Rather than writing an arcade game, you're expected to use them just for designing screens. Bit of a cheek to call them sprites, really.

The *Screen Designer* lets you mix and match 25 of the 36 'sprites' loadable at one time. These screens are always in mode 0. You can stretch the 'sprites' in both the x and y axes. There is no clash between them, because the colours do not clash with each other.

Specifications are not that special: 60 screens can be remembered at once. Bear in mind all those screens consist of is the positions and sizes of 36 different sprites.

What's good about the system is the way in which ordinary screens can be loaded in and played around with. Merging two screens together is no problem either. Although nothing overly special, this is a worthwhile program.

The *Database* is more useful. Putting information into this, sorting it, and printing it out in a given format is easy. To demonstrate this, a sample datafile, handling a record collection, is included on the disk.

Allsorts

Once you have some data to work with, you can sort it. The *Big Batch Database* supports two forms of search, the standard and sliding varieties. The former compares the beginning of fields with the search string, while slide searches go through the whole field looking for a match with the search string.

Sorting a file by any one field is easy enough to select, but takes time to complete. Oh well, they also serve those who only stand and wait. On a similar note, a sub-file can be drawn from the main database: this can be totalled up, erased or saved separately. The logical operators are concerned with 'equal to', 'not equal to' and greater or lesser than certain values. Similar searches can be performed on characters. You could, for example, delete all the entries beginning with A, or get a list of records larger than a certain value.

The last major feature of the program is tied up with the latter: you can output groups of records as reports. The reports can be sorted by fields, but fields which don't matter don't have to be printed (clever!).

There are also various odds and ends to look after the filing system and screen colours. The most important feature, though, is in a separate program – the initializer. This resets the database, letting you edit file sizes, layout of records, etc.

Up to 500 records can stored at once. The field types can be alphabetic, numeric or simple Y or N. File structures can be loaded and saved, and configuring the program is not difficult.

The *Football Predictor* progam is simply a souped-up database with a few logical guessing routines that is really aimed only at people who want to introduce some method to their madness. Forget it.

Although the manual for this is much better than for either *Super Meddler* or *Blitz* (it's book shaped rather than a few tatty sheets of A4), it still suffers somewhat from being unreadable if you're a novice. A few more examples and discussion would have been nice, rather than a fairly dull list of features. Still, it's better than a poke in the eye with a sharp stick.



▲ A Batch of utilities

Big Batch is pleasant to use, efficient – if not lightning fast – has a passable manual and is well worth the asking price. Let's hope that Nemesis continue their range in a similar vein.

ONLINE

Press for action with PAT McDONALD

In this month's round-up for comms fans: a long hard look at *Microlink*, Telecom Gold's scrolling business service: is it worth the cost? And *Cynotel* – an old friend making a welcome return

MICROLINK

☎ 0625 878888 ● Cost: see box below

The omens are not good. It's a pity, for instance, that getting onto the service is so unclear. Once you are registered, you're presented with a tacky piece of paper that tells PC owners to use their supplied software! Oh well, here goes.

There are three ways to use *Microlink*. The first is to dial *Telecom Gold* direct, on their London number. This is expensive: what is needed is a local number. Such a pathway exists, in the form of a PSS account. (This last confusing acronym stands for Packet Switch Stream, and is a convenient way for British Telecom to string together lots of comms enthusiasts and various computers. It has nothing to do with the company PSS, who do strategy wargames. Message ends.)

Using PSS can be a pain, because you have to type in strings of identifiers to your local PSS node. It saves money, but unless you have some nifty auto log-on software then it doesn't save a great deal of time.

Cost of comming

Registering costs £5. Then there is a standing charge of £5 per calender month, or part thereof. You are also charged by time on the service: if you're direct dialling, the cost is 11p per minute standard rate, 3.5p per minute standard rate. Using PSS is much cheaper: logging on with a 300/300 modem costs 2.5p per minute, and a 12/75 system costs 3p per minute. And that's at any time, day or night.

You can register to send telexes at any time, which costs £10. Each telex costs from 5.5p for 100 chars in the UK, up to £2.75 for 400 characters to any ship at sea. (Great! We could send a greetings card to the publisher on his yacht.)

These prices don't include the extra and separate cost of using the phone. Cheap and *Microlink* don't mix.

The third way to log-on is to use one of the many Debenhams computers, which is probably useful only if you have a local branch.

Moment of truth

So you've registered, got online, done your ident and password, and set your alarm clock so you don't overspend. What do you get? Not an awful lot really. *Microlink* is text-only, which means reams and reams of text flowing across your monitor. It doesn't look nice, but on the other hand you do get the data faster than on, say, *Micronet*.

Once you're in, the orientation of *Microlink* is obvious. The service is all about talking to other people. 'I've been doing that for years – what's so different about that?', I hear you ask. Well, *Microlink* lets you talk with some fairly outlandish services. You can for instance receive Meteorsat weather pictures and display them on your computer screen. Then there's the world news service offered by Dialnet, a huge US company. Most of the news is like a goldmine: four tonnes of overburden to one ounce of gold. But the ounce makes it worthwhile. Reading all the truly global news can take you an hour or more. Its UK correspondent, by the way, is none other than Steve Gold, erstwhile *Micronet* hacker.

Chatline

There are several ways to talk to regular users, from the usual bulletin board (big), through the usual mailbox (Telecom Gold), to the more exotic ways. You can send Telemessages (remember telegrams? This is the next best thing nowadays), Telexes, and even use Interflora by means of a credit card. If you have a radio pager, it can be set to go off when you receive a mailbox or telex. Pretty useful, I suppose...

In truth while the special features are laudable, you can do all of them without incurring *Microlink* charges. They're gimmicks, toys to try and please. The Telex option is quite useful, but wouldn't a machine be cheaper? For the home user it's like a Filofax: nice to have, but you managed all those years without it. Small businesses, however – that is, under five foot – could well find these particular *Microlink* comms options invaluable.

The story doesn't end there though, because there's plenty of information providers too. Plainly speaking, these are groups or individuals who provide information: for a price. Services available include legal advice, translations into 36 languages, and typesetting documents. You can also take a look at fortchcoming London shows, and book tickets in advance.

Overpriced

The cost of using your CPC for comms never seems to decrease. I wonder how much cash UK modem manufacturers are raking in? A comparative US price for a modem simply replaces the sterling symbol with a dollar sign. UK modems are, on average, 170% of the US price.

***Microlink* will quite happily sell you a modem for £179. It's finished in a black and red trim (a nice match for your Konix joystick, designer Amstrad fans). Capabilities are good at the price: 300/300,1200/75 and 1200/1200, all full duplex. You can get an RS232 interface too: the official Amstrad one costs £55. A lot of cash, but the software is adequate to get you fully operational – it will allow you to use both viewdata and scrolling boards.**

Compare the *Microlink* price of £299 for a year's sub. plus equipment with the *Micronet + Propak* at £236.40. Personally, I'd get the *Microlink* one, because it can handle full 1200/1200. The *Propak* can't.

For the business person there's company advice, listing facts and figures on all 1.7 million UK companies. This certainly does not come cheap. There's loads more company information available: they can even track down international finance.

Finally we come to the edge of *Microlink*. Gateways are availble to other, overseas computer bases. One example is Euronet/Diane, with over 600 scientific and technical sources. There's also the great European dictionary, which is 380,000 words long and growing fast. All sorts of goodies that are not actually part

of *Microlink*, but which can be accessed from it.

Signing off

Microlink is undoubtedly daunting. There is so much, with hundreds of different options. The parts of most interest are the news service and the Closed User Groups. CUG's are available on a wide variety of different subjects, including ham radio.

On the one hand *Microlink* is pricier – much pricier – than *Micronet*, with no graphics or frills. It looks and sounds dull. On the other hand there is a huge amount of information to look at. And there's the comms options, which appear much faster and more comprehensive than *Micronet*.

On balance the average home user would do better to stick to the more comfortable *Micronet*. I think I'll be back to *Microlink*, even if it's just for the excellent news service. ●

AA goes online!

Remember *Cymrutel* from *AA38*? The sysops now run a small section devoted to your favourite publication: no, not *Viz*, *Amstrad Action*! To get in touch with us via *Cyrmrutel*, type *AAGATE# to get into the separate area. It's quite impressive, and I'll be keeping a careful eye on the mailbox for any messages for *Reaction*, *Hottips*, *Cheat Mode* etc. So get online, logon and communicate!

● Viewdata 12/75 7 data even parity 1 stop bit
☎ 0492 49194
Sysop: Ian Woodroffe

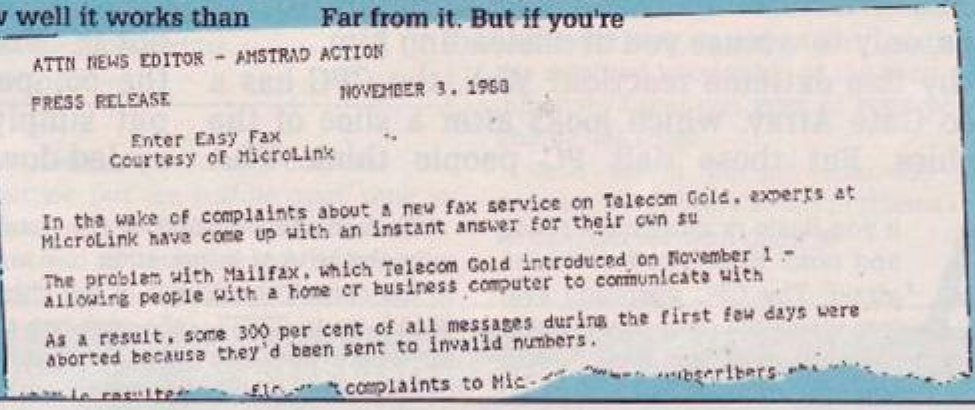


● AA goes Online!

PRESS RELEASE OF THE YEAR

'Easy Fax', is a recent addition to *Microlink*. It incorporates 'Fax-Check', a simplified method of seeing whether messages queued for transmission have been correctly sent. And what better way to advertise the service and illustrate how well it works than by sending out a fax using the service?

The press release is reproduced below and ends proudly: *'Please note that both Easy Fax and Fax Check were used to send this press release'*. Now we're not claiming we're perfect. Far from it. But if you're going to knock a service, claim you're better and proclaim that you believe in it so much you're going to use it to issue its own press release, you'd be well advised to make absolutely sure you're on firm ground.


ATTN NEWS EDITOR - AMSTRAD ACTION

PRESS RELEASE NOVEMBER 3. 1988

Enter Easy Fax
Courtesy of MicroLink

In the wake of complaints about a new fax service on Telecom Gold, experts at MicroLink have come up with an instant answer for their own su

The problem with Mailfax, which Telecom Gold introduced on November 1 - allowing people with a home or business computer to communicate with

As a result, some 300 per cent of all messages during the first few days were aborted because they'd been sent to invalid numbers.

[illegible] complaints to Mic [illegible] subscribers [illegible]



● Microlink's telesoftware lists



● Microlink's options

CYNOTEL

Viewdata 12/75 7 data even parity 1 stop bit
☎ 01 3462816
Sysop: Julian Smith

Cynotel has been offline for a while, and it's good to see it back. A viewdata bulletin board based in London, it has a special interest: it runs on a CPC with a 5.25 inch second drive attached. The result is impressive, all things considered.

Getting on to look around is very easy. Simply type in your name and 00000 for a password, and you'll be in under the guest facility. You can look around, upload a public message, and say hello to the sysop. Full registration takes about a week, but then you can actually access the whole of the board.

One of the more novel features is an area aimed specifically at those who want to set up their own bulletin board with an Amstrad CPC. Examples of boards set up are listed, as well as software to get you going. Only snag is, most of this only works for the *KDS 104 Communicator*, which is actually prohibited from connection to the BT telephone system. I've never heard of any harm resulting from using it, but I certainly wouldn't use it if I was setting up a bulletin board.

There is an area devoted to the CPC: unfortunately updates take some time to complete (sometimes a weekend), so this area can't be depended on to be around. When it is there, there's a few hardware/software reviews, hints, tips, news etc. Not a great deal to get excited about.

Of more interest is the availability of people willing and able to help with problems. Drop a line to the public board, and you should get an answer. Telesoftware is available too: some of it is good.

One feature of *Cynotel* I haven't talked about is the gallery. This serves a similar purpose to our own *AA Gallery*, in that artistic graphics can be placed on public display. There's a big 'don't touch' notice, indicating written permission is necessary in order to use the pictures elsewhere.

I recommend going on *Cynotel* for people who haven't done much comming before. There's a comprehensive help page, easy gateways and you can't get lost.

A beginner's board, but worth keeping a mailbox on and contributing regularly.



● Cynotel: not just a pretty menu

THE LOOK

Part four of a graphic series with PAT McDONALD

How to annoy a PC owner: tell him you bought a machine with VGA graphics for a few hundred pounds. Within seconds, he'll be sprinting to the shops, only to accuse you of misleading him...

Why this extreme reaction? Well, the CPC has a Video Gate Array, which looks after a slice of the graphics. But those daft PC people think VGA means 'Video Graphics Adaptor'.

Anyway, remember all those INPs and OUTs from last month? The gate array uses similar commands, but is none too easy to explain, mainly because of the compacted nature of the device: gate arrays, put simply, are collections of many components, scaled down onto one chip.

All you Basic programmers ready and rarin' to go? Bad news I'm afraid. The CPC operating system does not like you talking directly to the gate array from Basic. Using machine code is OK, though, so here goes.

Remember, only use instances quoted here. Don't expect us to foot the bill for your experimenting!

To use some feature of the gate array, only one byte of information has to be fed to the chip. The address of the chip is no. 32512, up to 32767 – the chip can be read anywhere between those addresses, and in hexadecimal this is written as &7FXX, with X anywhere between 0 and F.

So the command to use is `OUT &7F00,n`, up to `&7FFF,n`. What, I here you ask, is the value of n? Depends what you want to do. The gate array looks after four main subjects, with another minor one. These are: extra memory (on a 6128); ROM selection (turning on or off); graphics mode; and the values of the pen colours. The minor subject is clearing the raster 52 divider, which isn't what it sounds like and I'm not going into.

What I will do is concentrate on the mode and ink changing. The CPC supports 3 graphics modes, labelled 0-2. The number of inks is set to 16 out of 27. These are numbered 0-15. Ink number 16 refers to the border colour.

For the MC buff

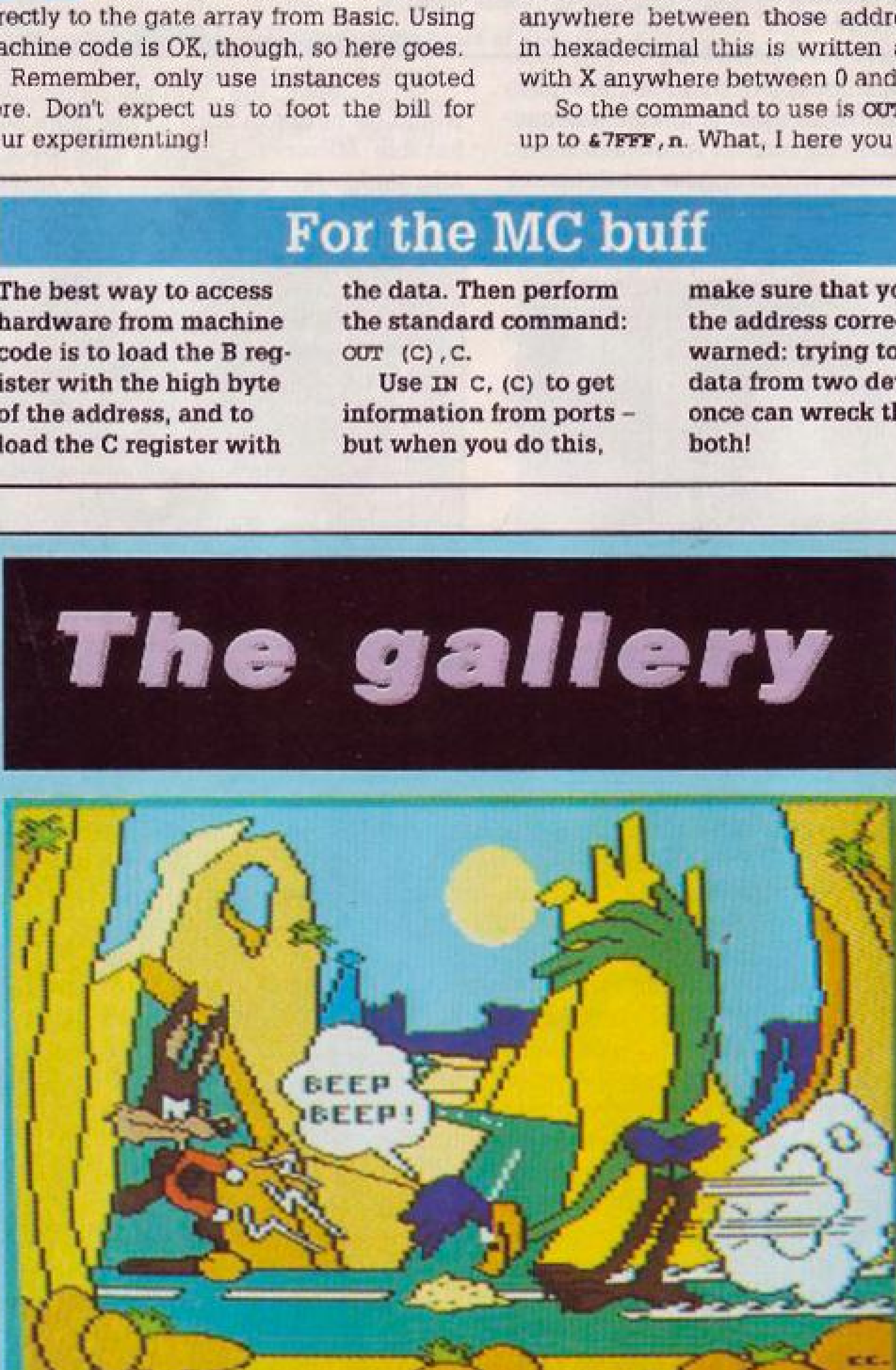
The best way to access hardware from machine code is to load the B register with the high byte of the address, and to load the C register with the data. Then perform the standard command: `OUT (C),C`.

Use `IN C,(C)` to get information from ports – but when you do this, make sure that you get the address correct. Be warned: trying to access data from two devices at once can wreck them both!

Cut it out

At best, you will find that any changes you accomplish are momentary. This is

The gallery



● Christian Capostaff's efforts on Road Runner net him £20 – on its way to Great Yarmouth



● Simon Fincher from Evesham was inspired by AA37.



● M Madden sent in a great collection: this is the neatest

Using the gate array

000XXXXX:	Select ink number to change, from 0-16.
010XXXXX:	Set colour value of selected ink.
100XXXXX:	Two least significant bytes are for the mode (don't use mode 3). Other bits refer to ROM selection, and the Raster divider.
11XXXXXX:	Switch extra memory banks in and out on 6128. (X can be 0 or 1.)

Using this, you should have some fun, if only messing up the ink colours. If you don't have much luck, never mind – it's aimed at machine coders.

because the CPC continually updates colours and screen modes, even if they haven't changed. By going around the operating system, your work is undone at the first opportunity.

At first sight then, the above information doesn't seem that useful – after all, what's the point of bypassing a system that then blithely ignores the changes you have made? The reasons I printed the above were twofold: to show machine coders how to go about writing their own mode changing/colour changing routines, and to prove that such routines are difficult to use from Basic!

Why bother? Well, bypassing the operating system can be a good idea. The os slows things down, and in graphics, time is of the essence. Let me explain: every fiftieth of a second, the electron beam scans down your monitor. Any changes to the display have to be completed between two passes, otherwise the screen flickers.

By cutting out the middle man, time is saved. But turning off the os is fairly drastic – it cuts out all those useful little background tasks like flashing inks and reading the keyboard.

Pokers' pleasure

Yes readers, those all singing and dancing sprite routines begin next issue. Now you will be able to use real sprites that don't interfere with the background and are multicoloured. (Pause for applause to die down. Or indeed, to start.)

With each listing we intend to have a shortish section for machine code readers to browse over, to gain a few insights. But the required knowledge of machine will be minimal: if you can PEEK or POKE you'll be able to use them.

And they'll be put into the public domain, so's there's no problems about writing games with them. ●

Further reading

➤ CPC Firmware Guide, Amsoft 968, £19.95.
Infamous for lacking an ISBN number. If you can find it, buy it: it's packed out with technical information of all sorts.

➤ Anatomy of the CPC, Bruckman-Englisch, Gerits-Steigers, First Publishing Ltd, ISBN 0948015462, £14.95.
Out of print, unfortunately. Translated from the original German, it lacks some clarity, but is nearly as good as the firmware guide.

➤ Ins and Outs of the Amstrad, Don Thomasson, Melbourne House, ISBN 086161190X, £8.95.
Difficult to get hold of. Although it lacks a lot of detail, it is relatively speaking an easy read.

Good for beginners in machine code who want to learn something about using the hardware.



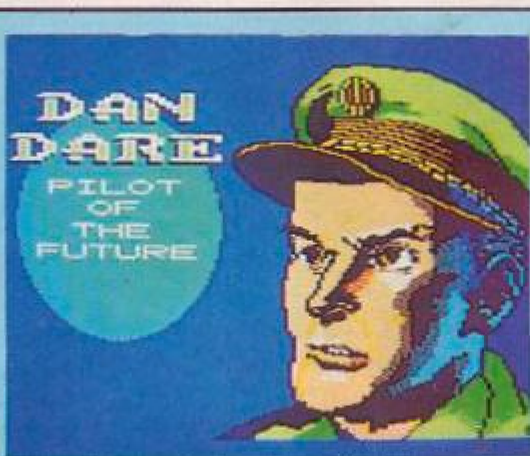
● Ray Thompson, part time Newport Paladin and artist extrodinaire



● C Capostaff drew for truth, justice and the AA way



● James Garside again with a more seasonal entry



● Gavin Blann Dares to try for the Gallery



● My personal favourite, but those arty people disagreed – from James Garside of Rhyl



● C Capostaff, with a nice pic drawn from advertising



● Gavin Manning, a Londoner and a certified Ghostbuster

ABSOLUTE BEGINNERS

Basic for beginners with ANDY WILTON

Last month we were up to our eyes in <s, >s and conditional commands. This month we move on to WHILE-WEND loops...

This program is very much like some we saw earlier in *Abs. Beg.* when we we looked at variables and expressions.

```
10 MODE 1
20 FOR  a=370 TO 0 STEP -10
30 CLS:MOVE 310,a
40 DRAW 330,a
50 DRAW 330,a+20
60 DRAW 310,a+20
70 DRAW 310,a
80 NEXT a
```

This draws a small square, drifting down the screen till it reaches the bottom. That STEP-10 tells the CPC to reduce the loop variable 'a' by 10 every time it runs through the loop until a goes below the second operand of the FOR command – zero, in this case. Now that's all very well, but it's not quite the effect we're after. Really we want the square to gain speed as it moves down the screen, so it looks as if it's falling: that is, we want it to move down by a greater amount each time through the loop, rather than the ten units fixed by the STEP size.

There's nothing too difficult about getting the square to gain speed. Edit lines 20 to 80 to look like this:

```
20 FOR b=0 TO 50 STEP 5
80 NEXT b
```

Now add these new lines, and then try the program out:

```
15 a=370
75 a=a-b
```

The square certainly looks a lot more as if it's falling, but unfortunately it doesn't get as far as the bottom of the screen. The problem is there's no easy way to work out what FOR or STEP operands get the square just to the bottom of the screen.

When we had the original listing it was simple. The loop variables are presented the height of the square above the bottom edge of the screen. We could use the second operand of the FOR command to stop the loop (and thus the square) at some particular value of the loop variable: some particular height above the bottom edge, in other words. With the second operand of FOR set to zero, the square kept on moving down until it was just off the bottom edge.

Aargh

Now, however, the loop variable is 'b'. This represents the amount by which the square moves down each time – its downward speed, in other words. We can only use the second operand of FOR to limit the maximum value of 'b', so we can't tell the CPC that was the height we want to stop at; just the speed we stop at. Either we work out how fast the square's going to be moving when it hits bottom (and who wants to do that?) or we spend five minutes trying different FOR and STEP operands.

If neither of those two solutions appeal to you, don't worry – there's a better and simpler way. Edit lines 20 and 80 so that the whole listing looks like this:

```
10 MODE 1
15 a=370
20 b=0:WHILE b<50:b=b+5
30 CLS:MOVE 310,a
40 DRAW 330,a
50 DRAW 330,a+20
60 DRAW 310,a+20
70 a=a-b
80 WEND
```

If you run this you should find it behaves exactly the same as it did before the alterations. In other words lines 20 and 80 form a loop which sets b to 0, adds 5 to b for each time through the loop and then stops when b goes over 50.

If you look at line 20, you'll see that it breaks down into three separate commands. The first and last of these are familiar: b=0 sets 'b' to 0 while b=b+5 adds 5 to b. That means that WHILE b<=50 and the WEND in line 80 form the loop and stop it when b goes over 50.

From this you should be able to see that WHILE and WEND are rather simpler than FOR and NEXT. WHILE-WEND loops don't have loop variables: in the above example . b is no different from any other variable. The only thing WHILE-WEND loops do have is a condition: b<=50, in this case.

Just as with IF-THEN-ELSE, this condition determines which of two things the CPC does. If 'b' is less than or equal to 50 then the condtion is true, and it repeats the loop. If 'b' is greater than 50, however, the condition is false and it stops repeating the loop.

This still doesn't solve our problem – after all, it only does what our program already did with FOR and NEXT. We can soon change that, though. If you remember, our problem with FOR was that you could limit only the loop variable b, and we wanted to limit the height'a instead. There's no such problem with WHILE. There's nothing special about any of the variables as far as WHILE is concerned.

At the moment the WHILE condition just tests for b going over 50, but it could just as easily test for anything you can write a contition to test for. If we change line 20 to:

```
20 b=0:WHILE a>=0:b=b+5
```

then the CPC will carry on looping until 'a' is less than zero.

This means that it will stop repeating the loop only when the square is about to go off the bottom of the screen – and that is just what we were after. ●

To sum up

- **FOR-NEXT loops are more complicated and do a lot more work for you. If you want a variable which increases (or decreases) by a fixed amount each time through the loop for use inside the loop, and if you want to stop after a fixed number of times or when the loop variable reaches some fixed value – it comes to the same thing – then FOR-NEXT is what you're after.**
- **If you want more freedom, WHILE-WEND might well be what you need. You have to do more of the donkey work yourself, mind you. If you want a variable increasin by some fixed amount each time through the loop, you're goint to have to fix it yourself. The b=b+5 in the new line 20 wasn't necessary in the old line 20, because FOR and STEP took care of that for you.**
- **When you need to decide which type of loop to use, just ask yourself (a) do I need the loop variable? and (b) when do I want the loop to stop repeating?**

Next month in *Absolute Beginners* we compare the two types of looping commands – the FOR-NEXT loop and the WHILE-WEND loop.

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BAR CPM

First Steps *part five with RICHARD MONTEIRO*

For the last few months *Bar CPM* has covered CPM's in-built commands – DIR, ERA, REN, TYPE. The last of CPM's in-built commands is brought to you courtesy of this instalment, together with a look at the files sitting on your system disk.

As you well know, using the DIR command forces the computer to display the complete contents of the disk, right? Wrong! In fact, DIR shows the contents of the *currently active user area*. Normally this will be zero, and it is very likely that all files will be stored in this area. If you venture out from the safety of user area zero, however, you will discover that files can be kept in any of 15 other areas. These areas are totally separate from each other. You can move between these areas by using USER followed by a number between 0 and 15.

The purpose of user areas may not be immediately obvious: imagine you have several file types on a disk (BAS, DOC, COM and ASM for instance). Rather than having all the files jumbled in one user area, you could have all BAS files in one area, all DOC files in another and so on.

CPM's user areas are on the same level, unlike other operating systems which use nested directories.

Transient types

Commands that identify program files on disk are called *transient utility commands*. There are over 20 on your CPM system disk. When you enter a command keyword that identifies a transient utility, CPM loads the program and passes it any filenames, data or parameters you may have entered. In the box is a list of transient utilities and their functions (we'll be looking at each in detail later):

STATus seekers

To display disk information under CPM 2.2 use STAT, short for STATus. The command not only displays secrets about files stored on disk, but also allows you to alter file attributes. Attributes actually determine whether files are read-only, read/write or hidden from the directory.

In its simplest form, STAT returns something like **A: R/W, Space 40K**. This tells you which drive you're using, whether the disk may be read and written to (R/W) or read-only (R/O), and the amount of space remaining in K.

Adding a filename after STAT forces CPM to show you information regarding the file. For instance, typing STAT AMSDOS.COM produces

```
Recs  Bytes  Ext  Acc
 2     1K     1  R/W A:AMSDOS.COM
Bytes remaining on A: 50k
```

assuming you have an unmodified 2.2 system disk in the drive.

The four headings stand for **Records, Bytes, Extents** and **Access**. The first three show the length of the file and how it is stored while Access displays the file's read/write status.

Wildcards are permitted with STAT, so STAT *.* displays information on all files on the disk. The files are listed in alphabetical order.

If you follow the filename in a STAT command with $R/O, you set that file to read-only status. Basically you can read the file, but you can't write to it or erase it. A file altered in this way can only be set to read/write by issuing a STAT filename $R/W command. You can also hide a file from the directory by using STAT filename $SYS. Similarly you can reveal a file by typing STAT filename $DIR. The only way you can tell exactly what's on the disk is by issuing a STAT *.* command. ●

Join us next month when we shall look at more exciting CPM utilities.

Name	Function	Name	Function
ASM ①	Creates executable binary code from assembly source.	PALETTE ≠	Sets ink colours.
AMSDOS ①	Returns to Amsdos.	PAPER ≠	Initializes printer.
BOOTGEN ①	Makes a bootable disk.	PIP	File copying program.
CHKDISC ①	Verifies that 2 disks hold same info.	PUT ≠	Directs printer or console output to disk.
CLOAD ①	Copies files from tape to disk.	RMAC ≠	Translates assembly source into relocatable code.
COPYDISC ①	Copies a disk.	SET ≠	Alters file options.
DATE ≠	Sets or displays the date and time.	SETDEF ≠	Sets system options.
DDT ①	Dynamic debugging tool.	SETKEYS ≠	Configures the keyboard.
DEVICE ≠	Assigns logical devices to physical devices.	SETLST ≠	Initializes the printer.
DISCKIT3 ≠	Disk utility program.	SETUP ①	Sets system options.
DUMP	Displays a file in ASCII and hex format.	SET24X80 ≠	Sets screen to 24 rows by 80 columns.
ED	A simple text editor.	SHOW ≠	Displays disk and drive characteristics.
FILECOPY ①	Copies files.	SID ≠	Debugger.
FORMAT ①	Formats a disk.	STAT ①	Displays disk and file information.
GET ≠	Console input is taken from disk.	SUBMIT	Automatically executes multiplecommands.
HELP ≠	Displays info on how to use commands.	SYSGEN ①	Copies CPM os onto a disk.
HEXCOM ≠	Produces a prog. file from MAC output.	XREF ≠	Produces a list of variables from assem bler source.
INITDIR ≠	Allows time and date stamping.	XSUB ①	Executes multiple commands.
LANGUAGE ≠	Selects the keyboard character set.		
LINK ≠	Links relocatable program modules.		
MAC ≠	Converts assembly source into binary.		
MOVCPM ①	Lowers CPM's memory top.		

① CPM 2.2 only ≠ CPM Plus only

FIRST BYTES

Our assembly language series with RICHARD MONTEIRO

Forget the pussyfooting around. This month we go for the jugular. You know how to load a register with a number, place a value somewhere in memory, retrieve a value from memory and even pass values between registers. The theory is all good fun, but the practical is so much better. Get out your *MA* (er... *MAA*), dust it down, and remove all REM statements. Do it!

Addressing refers to the specification, within an instruction, of the location of the operand on which the instruction will operate. In plain English, addressing modes are different ways of specifying the location of data. Here is a quick look at various addressing techniques, and how you might use them with the LD (or load) instruction.

Implicit (Implied or Register) Addressing: instructions which operate exclusively on registers. For instance, LD A,B – which translates to 'transfer the contents of B into A'.

Immediate Addressing: the operand contains the actual data. The data is available immediately; it isn't necessary to fetch anything from memory. LD B,24 and LD HL,2345 are prime examples.

Absolute Addressing: refers to the way in which data is retrieved from or placed in memory. LD (34524),A and LD HL,(45656) for instance.

Direct (Short or Relative) Addressing: the opcode is followed by an 8-bit address. Typically this is the realm of JR-like instructions. We haven't dealt with these yet, so don't worry. Suffice to say that you cam jump forward or backwards in your code by 127 bytes.

Indexed Addressing: technique used to access the elements of a block (or table) successively. The idea being that the instruction specifies both an index register and an address. The contents of the register are added to the address to provide the final address. There are two index registers, IX and IY. LD A,(IX+5) is acceptable. ●

Next month: more assembly language programming; addressing techniques in full; and a final look at the hidden Z80 instructions.

HACKERS ONLY

Armed with last month's knowledge of the hidden SLL instructions, you should be pumping out code with instructions that officially don't exist. **Damian Scattergood**, for instance, has written a short routine demonstrating the use of SLL (HL). Damian's routine fades the screen to red in Mode 1 and then to black.

The source code below can be entered with little modification into most assemblers. You can **ORG** the code it into any sensible area of memory:

```
XOR A
LD B,A
LD C,A
INC A
CALL &BC32
XOR A
LD B,A
LD C,A
CALL &BC38
LD B,8
loop
LD HL,&C000
LD DE,&4000
loop1
DB &CB,&36 ;sll (hl)
INC HL
DEC DE
LD A,D
OR E
JR NZ,loop1
DJNZ loop
LD HL,&C000
LD DE,&FFFF
LD BC,&2000
loop2
XOR A
LD (HL),A
EX DE,HL
LD (HL),A
EX DE,HL
DEC DE
INC HL
PUSH BC
LD B,15
loop3
DJNZ loop3
POP BC
DEC BC
LD A,B
OR C
JR NZ, loop2
RET
```

The majority of hidden Z80 commands relate to IX and IY registers. If you study the opcode for any index register command and compare it with the HL register equivalent, you will find that the index register opcode is simply the HL code preceded by hex value DD (for IX) or FD (for IY). Don't forget that as IX and IY are index registers, you'll also have to add an offset byte. For instance, `ADD A,(HL) 86`, `ADD A,(IX+4) DD 86 04`; `DEC (HL) 35`, `DEC (IY+2) FD 35 02`.

There are however some gaps in the logical sequence of codes for the index register instructions. LD A,H (hex 7C), for example, has no published IX or IY equivalent, whose code would be DD 7C or FD 7C. If you experiment with those codes you will find that the high bits of IX or IY will be loaded into the accumulator. Similarly, LD A,L (hex 7D) has no IX or IY equivalent. But again, if you experiment, you will find that the low bits of the IX or IY are loaded into the accumulator.

The implications of this may not have hit you yet *(frankly, no – ed)*. But suddenly you have another four 8-bit registers – the high and low bits of IX and IY. On the Amstrad, where there are precious few registers to play with due to the operating system's exclusive use of the alternative set, this facility is more valuable than... than something which is quite valuable.

Next month: the full list of hidden index register instructions AND examples of how to use them!

MAA MEMORY MONITOR

Here is a short and simple text dump routine to enable fast scanning of memory for Ascii messages. Kindly supplied by David Till of Dudley, who wins himself a crisp tenner.

Simply load MAA (AMCUSTOM.BAS) and make the following alterations to these lines:

```
2100 LOCATE 30,15:INPUT"
  Choose..",a
2110 ON a GOSUB 2130,2980,3271
```

Add these lines:

```
2095 LOCATE 27,13:PRINT"(3) Text
  Dump"
3271 CLS:INPUT"Start location";lo
3272 IF lo<0 OR lo>65535 THEN 3271
3273 CLS
3274 p=PEEK(lo):IF p<32 THEN p=46
3275 PRINT CHR$(p);
3276 lo=lo+1:a$=INKEY$
3277 IF lo>65535 or a$<>"" THEN
  RETURN
3278 GOTO 3274
```

Finally save the file as AMCUSTOM.BAS. The alterations add an extra item to the menu. By pressing key 3 you will be prompted for a 'Start location'. Simply enter any value between 0 and 65535 to view the contents of memory in Ascii form.

You win a crisp tenner if your *MAA* tweak is published. Entries to *MAA Tweak/First Bytes*, Gorgeous Richard Monteiro *(shome mishtake shurely – ed.)*, 4 Queen Street, Bath, BA1 1EJ.

PROBLEM ATTIC

A bumper extravaganza monster edition with PAT McDONALD

Just popping out

Over a year ago I built a second disk drive using the Hitachi HFD305SX drive, which is working perfectly on my 6128. Using CPM+ is it possible to operate this disk drive on double density?

While we're at it, I have noticed some disks pop out of the internal drive quickly, while others just creep out. Is there anything that can be done to encourage the slow ones to hurry up a bit?

Alan Coleshill, Sheffield

If it is a double density drive, then the answer is yes. A good choice for CPM+ would be Ramdos, a disk utility from KDS (☎04853 2076). Price is £24.95.

On your second point: it's the disks that are at fault. We've found the best way of removing sticky disks is to raise and push them in slightly, then eject. Much better than pliers or hammering on the eject button.

Upgrade troubles

How do I avoid having to throw away six years of work writing programs for Bridge scoring simply because of a little change (!) from the CPC464, 664 or the 6128 to 'Big Brother' – the PC1512.

Many clubs are totally satisfied with the 6128 version of my scoring system, but several bridge buffs would like to think that they could 'easily' move over to the 1512 or 1640. No-one has offered even a hint of a solution on how.

Seems like we are all doomed to a terrible fate – even worse than having to use something other than the wonderful Amstrad range. Is there no one who will rid me of this scourge? I've written to other mags who remain ominously, knowingly silent.

F B Brighton, Sheffield

Cross transference of programs from one machine to another totally different one is notoriously tricky, even for major software houses. I suggest that you get in touch with PC Plus, our sister magazine for the PC. Write to them at our address, include a few more details, and the info will be passed on.

Mouse: not a squeak

I have a NEOS mouse I thought maybe it would work on my Amstrad CPC464. It doesn't. Moving it does not give any response. Pressing the right button gives **65RTGF**. When I switch the computer on, lots of arrows and **XZ** are printed on the screen. I have no other gadgets connected. Please put me out of my misery and tell me how to get it working.

Shabaz Yousaf, Slough

Using a mouse on a CPC generally needs some sort of interface. Try talking to AMS (☎0925 413501) or Siren (☎061 228 1831) about interfacing. They should be able to supply you with such an interface, as they produce mice for the CPC.

Ram jam

Can you supply any information about how to connect extra RAM to a 664 and make it behave like a 6128? I can find no advertisements for the 64K and 256K RAM packs, and I am capable of constructing the required circuits to expand the memory. I have details of the ROM boards, and there are several types available, but no-one seems to make RAM expansions.

Kevin Seymour, Portsmouth

Dk'tronics used to make the RAM expansions, but their business is now handled by RAM Electronics. Contact them on ☎0252 850085. As for doing the upgrade, a full project on installing the 6128 ROM was published in AA30. You never know, maybe one day we'll publish a RAM pack in Soldering On*: that is, assuming we receive one...*

Shorts

First, I would like to know how to set up RSX commands. I've noticed that the Classic Collection has gone from *Cheat Mode*. Will it return? Has there been a poke for *Arkanoid*?

Adam Lloyd, Tunbridge Wells

The full story of RSXs can be found in the Firmware Guide (see the answer to G Ross) but broadly speaking it goes something like this: a call is made to **&BCD1**, *with BC holding the address of a command table, and HL pointing to four spare bytes of RAM. Setting up an RSX using Basic alone is not possible: some machine code is always involved.*

Classic Collection ran out of requests for old pokes. Arkanoid? How did you miss them? Disk Arkanoid was covered in AA22 and 23, with other pokes presented in AA25, 26 and 36: a Multiface poke was printed in AA37.

McDonald fails to measure up

I was really pleased to see your reply to my letter in *AA*39 and, with warm feelings about *AA*, I duly sent off my order for an *FD*39 tape drive belt to Maplins.

A few days later, the requested belt arrived and, wielding a trusty screwdriver, I started delving into the innards of my trusting CPC464. Following the excellent instructions which Richard Johnson gave in *AA*33 I soon had the old drive beltout and it was then that my warm feelings turned to dismay.

The new belt is actually bigger than the old one which would, I think, yield more 'Read Error b's had I fitted it.

Something stinks, *AA*, and I'd like an explanation!

L K Chapman, Pentre

Erm, it was me. OK, OK I got the measurement wrong, and for that I'm very sorry. Steps are being taken: we're making absolutely sure that the part is right this time.

Next month we'll print the number, in the meantime we'll send you an example to test out. And Steve is at this very moment preparing to set fire to my feet.

Get 'em off!

Get your contributions off now to: *Problem Attic, AA*, 4 Queen St, Bath BA1 1EJ

Taking the PIP

I have a 6128. When the Logo TS command is used, and you type something in, the first letter appears at the top of the screen as well as near the bottom and the rest of the word continues near the bottom, so I end up typing TS CT to cure the problem

Is is just my copy, or is it a general fault? Also when copying files using PIP, I have to put in and take out disks rather a lot. Does this damage the drive?
Niall Couse, Bishopstown

It's not your fault Niall: everyone has to put up with it. And no, taking disks out and putting them in a lot doesn't do your drive any harm. It's a nuisance, but that's all.

Eternal question

I am interested in writing an interrupt driven sprite routine, and continuous sound, on my 6128. I understand that you have to set up things called events, but I don't understand how to set them up.

Also, would the procedure be different for a ROM routine?
G Ross, Oxford

I assume that you want to set up a machine code event. The whole subject is too long for Prattic, but here's the gist of it. First, you have to tell the operating system that you want a certain routine to execute every so often. This involves a call to &BCEF. A data area has to be specified, to help keep track of the information. Next, a call to &BCF2 activates the routine.

It's worth noting that there are three forms of event: the normal event ('ticker') which occurs 50 times a second, the 'frame flyback' which is synchronised with the raster scan of monitors, TVs etc: and the 'fast ticker', which can operate up to 300 times a second. Different event structures have different call areas.

I suggest you get SOFT 968: the CPC Firmware Guide by Amsoft. It costs £19.99 and is full of information on the machine. (MJC Supplies ☎0462 32897)

If you're trying it in Basic, the relavant info is on Chapter 9 page 30. Chapter 7 page 7. Analyze the example and look up the keywords used (AFTER, EVERY, ON SQ).

Hungry Amstrad

I own an Amstrad 464 that keeps chewing my tapes up. Is it hungry after all the games it's loaded? During the last month it has got through Ping Pong, Ikari Warriors, Target Renegade, Mickey Mouse, and now Football Manager 2 for breakfast. Since then I've smashed the plastic dust cover due to my moodiness. I've ordered a 6128, but I really do want a working 464. If it keeps on chewing the tapes up, it'll have to go. Can it be fixed? My computer is three years old.
Haydn Warrent, Llandudno Junction

Look on the bright side: your machine appears to have excellent taste.

It's probably just got too dirty through long usage. Take it to someone who repairs conventional cassette recorders. They'll have it fixed before you can say Amstrad Action.

Cap in hand

I have a 464 and I love to type in programs but there's one thing that is blocking the way, which stops me completing my programs: character 160 in the Ascii character set. I just don't know how to get it into a program and for it to stay there without deleting itself. Could you please tell me what to do?
M Packer, Fleetwood

What is printed as ^ in listings should be typed in as the up arrow next to the CLR key. This happens rather too often for comfort. If you see a 'hat' in the middle of a listing, nine times out of ten it should really be an up arrow, indicating 'to the power of'. If it's in the middle of an equation, then it certainly should be an arrow.

Any old *Protext*

Is it possible to purchase an interface for the CPC to control, say, Lego motors by entering a Basic program?

And does *Protext* run on an unexpanded 464?
Jonathan Cochrane, Coleraine

I advise you to purchase a good book on using your computer for control applications. The Robot Book, *written by Richard Pawson, published by Windward (ISBN 07112 20414-4), costing £7.95 for the paperback, is a really excellent introduction to the subject. Very highly recommended, although not specifically aimed at the CPC.*

A device that will let you carry out the projects is the Circkit/Honeysoft HSP1, *for £27, inclusive of tape software, VAT and P&P. KJ Bennet of Budgetsoft is currently checking your order for* Tomahawk. Protext *on tape will work on an unexpanded 464.*

Think of a number

What are the data numbers to load A with a random number? Here's an example of what I mean:

```
&4000   OUT (C),C   ED,49
&4002   LD A,R      ??,??
&4004   NOP         00
```

Barry Boschen, Surrey

That command loads A *with the* R *register. This is not a random number generator: instead, it merely stores the refresh value for the memory chips in the accumulator. Anyway, the opcodes for that command are* ED, 5F.

Using the R *register on its own is not enough for very random results. Try storing the figure in memory and adding it to a 16 bit register pair, then* AND*ing it for the range required.*

We have the technology

I own a 6128, and I have a 5.25 inch second disk drive. I cannot run any of my games that I have copied to my 5.25 inch disks, as the computer goes back to the default drive to load the rest of the files. Is there anything I can do to prevent this?
Thomas Brennan, Pimlico

Yes. Strathclyde Developments is working on a switch you mount inside your 6128. On flicking it, the A and B drives are switched around. Neat. I'll take a closer look in next month's Hardware Projects, but if you can't wait then contact them on ☎0292 541283 between 6 and 7pm.

AA SMALL ADS

FOR SALE

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Windows, icons and pointers on any CPC. RSX commands usable directly in your Basic programs. Come with demo programs and manual (including tutorial). Cassette £10, disc £12.00. Send Eurocheques to: Mark Rison, 7 Chemin Des Colombettes, Appt 11, CH-1202 Geneva, Switzerland.

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Rom deactivator, fits between computer & romboard, undetected by software, 100% loading every time. LED status indication plus special reset switch. £15.99. D Crossman, 61 The Crescent, Breaston, DE7 3DE. SAE for details.

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CPC464, green screen, DK 'tronics 64K ram pack, disk drive. £200 worth of software including games and utilities. £60 worth of programming books and magazines. £250 the lot. Tel: 0582 864156.

WANTED

Colour monitor also printer eg DMP2000 for CPC6128. Phone Jim 0424 210446.

Wanted DDI1 first disc drive for CPC464. Must be in good condition. Will pay £50. Telephone: 0305 848879.

Wanted colour monitor only for CPC6128. No disc drive and keyboard. To update from green screen to colour screen. Tel: Marc Westwood on 021 429 6163. Thanks.

SERVICES

Eprom Service your own programs (Basic, Basic/Binary, Binary) programmed into eprom run using RSX commands from £9.95. Tel: (0438) 354908 (evenings). DJ software, 25 Dovedale, Stevenage, Herts. SG2 9EP.

Phoenix Tape to Disc specialists. state 464/6128. 85p per game, Compilations 80p per game. Multiloaders £3.50, add 30p for each tape to be returned if required. Enclose disc, Tape, instructions & Inlay card when ordering. Phoenix, 10 Walter St, Draycott, Derby, DE7 3DE. Tel: 03317 4490 after 7pm. SAE for catalogue. If we can't disc it no one can. Try us and see!!.

Tape-to-Disc conversions 464/6128: send original tape(s) plus a disc & 75p per game (max. 6 games per disc) and we will transfer them to disc. Compilation tapes 70p each game. If you want tapes returned add 30p per tape to total cost. We also run a Disc Recovery Service recovering erased games etc. We can supply discs for £2.50. State whether 464/6128. Send SAE for free transfer list & games for sale. D R Hudson, 13 Cromwell Road, St Austell, Cornwall, Tel: (0726) 65640. Please note new address.

CPC users! Join CPC software library now! Only £2 membership. Loadsa games, utilities etc.. Latest titles now available. Write: CPC, 58 Hawkins Street, Hill Top, West Bromwich, B70 0QS.

Eprom copying service. Personal back-up only. Have your eprom copied onto a blank eprom. Includes eprom, post and packaging. Send £10 to P Williams, Barnwell Consultates, 105 Ditton Walk, Cambridge.

Earn extra income with your Amstrad. Cash in on the demand for office services. Unique guide shows you how to get started. SAE to Avoncliffe, 5 Cliffe Drive, Limpley Stoke, Bath, BA3 6HY.

OTHER

Computer appreciation diploma. Answer question paper. Only £14.95. A prestige framable certificate. Newcomers and old hands details: Coordinator, Miss T Cowell, 14 Lanes End, Totland, Isle Of Wight, PO39 0AL.

Fed up with games - or can't afford the one you want. Your micro can earn you extra cash. Further details. SAE, AA2, 429 Portway, Bristol, BS11 9UQ.

This section of the magazine offers you the chance to speak directly to the huge world of CPC owners -or would be owners. Users report good results.

You can place an ad up of up to 30 words for just £5. So you could use it to sell a printer or launch a user group or publicize a piece of software you've written. One thing you can't advertise is the sale or swap of software. Such ads can be misused by pirates.

Fill in the application form and send it to us together with payment. We'll then place the ad in the next available issue (published 2-7 weeks after we receive your order.

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ELECTRONIC ARTS

winners of *AA's* first 'Games House of the Year' award want you to help them celebrate!

It's not easy to produce a hit game. Producing a faultless succession of hits is even harder. And to get it right in your first year is not far off impossible. Yet that's what Electronic Arts have done. This is what they did in '88:

- *Arcticfox (AA35; an 81% Rave)*;
- *The Bard's Tale (AA36*, their 90% *Mastergame*);
- *PHM Pegasus (AA37*, 84%: *Rave)*;
- *The Train (AA38*, 80%: *Rave)*.



● Seasonal snow frolics in Arcticfox

● The Train, set in WWII France

● Bard's Tale – not roleplaying, but a great game nonetheless

● PHM Pegasus: simply brilliant!

Some record. For that, they richly deserve their award as *AA's* first 'Games House of the Year'.

Naturally they're more than a little chuffed with this award, and naturally they want to celebrate. And who better to celebrate with than you, the people who bought their games and made them what they are today?

That means a competition. That means winners: six, to be precise. The prize is simple: everything Electronic Arts release in 1989. Yes, everything. Already we know that will include *Skate or Die*, *Ferrari Formula One* and *Chuck Yeager's Advanced Flight Trainer*. There will be more: and you will have it.

And that's not all. For you will also visit Electronic Arts HQ and see how their games get written, and by whom. You'll see top security items: games awaiting release, games in production, games at the planning stage.

And that's not all. For by winning this competition you will prove that your judgment of what makes a good game is not in doubt. So we will be asking you to report on Electronic Arts' releases during the year. What we want to know is: are they going to be 'Games House of the Year 1989'? Or are they resting on their laurels? Getting over confident? Going off the boil?

During the year to come we shall be monitoring their progress, with your assistance. That means getting your name and opinions where it matters – in *Amstrad Action* – regularly throughout the year. In effect, that means you will be playing your part in helping 35,000 people decide whether they want to buy a game or not. So we have to make sure you're up to the job.

Here's what you do. Tell us what you think was this year's best game – by Electronic Arts or by whoever – and, in 15 words or less, why. Simple? Don't be fooled. There are a lot of smart people out there who want to win this prize, and they'll be trying hard. So you had better do so too.

NAME: ______________________ AGE: ____

ADDRESS: ______________________

____

TEL. No. (If you have one): ______________________

I THINK THE BEST GAME OF 1988 WAS:

____

AND IT WAS BEST BECAUSE (in 15 words or less):

____

____

____

____

Send your entry by 15/1/1989 to:
Electronic Arts Competition, Amstrad Action 4 Queen St, Bath, Avon, BA1 1EJ

photocopies of this entry form are acceptable. One entry per entrant.

Competition rules

1. Not open to employees of Future Publishing Ltd or Electronic Arts or their relatives. Sorry mum.
2. Photocopies of the entry form will be accepted, but only one entry per entrant may be submitted. Where this rule is broken all that entrant's entries will be discarded.
3. Entries received postmarked after 15 January 1989 will be discarded.
4. All entries and their copyright become the property of Future Publishing and may be used in any way thought fit.
5. The editor's decision is absolutely final, and no correspondence can be entered into.
6. Entry is an acknowledgement and acceptance of these rules.

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ACTION TEST

Games galore with GARY 'GbH' BARRETT

● Gremlin travel back in time (this page);
● Incentive do it again! (p.48);
● *Barbarian* (yes, another one), p.46;
● *Operation Wolf* is on p.47
● and Codemasters go full price (p.61)

ARTURA

Gremlin ● £9.99 cass, £14.99 disk joystick/keys

Once upon a time there was a sword called Excalibur that lived in a rock. It may seem an odd place for a sword to live, but some stupid idiot shoved it in there for a bet. There was a rumour going around that the person that could pull the sword out of its rocky scabbard would be a really nice guy and an ideal candidate for king. Needless to say there were many people willing to suffer the awesome responsibility of being king (the great wealth and possession of a kingdom being even more important). Eventually a wimpy guy called Arthur dragged the sword out and said 'Where's me castle then?' And so the legend of King Arthur was born.

The Verdict

GRAPHICS 67%
- Detailed sprites.
- Lacks colour.

SONICS 62%
- Title tune is nice but soon tires.
- Few effects.

GRAB FACTOR 74%
- Walking round hacking things is fun.
- Confusing at first.

STAYING POWER .. 78%
- Large castle to explore which demands mapping.
- Stupid opponents make life too easy.

AA RATING 75%
- Better than Gremlin's recent attempts, but not quite a *Rave*.

Artura is based on this legend and set in the kingdom of Albion *(doing ever so well since Atkinson left, by the way – ed.)*. Albion is in a bit of trouble at the moment and to get it out of it the sacred treasures of Albion must be collected and only Merdyn the Mage knows where they are. Merdyn has mysteriously vanished and his apprentice, Nimue, is being held prisoner in the castle of Artura's half sister, Morgause.

The screen is split into two bits: a flick screen playing area in which Artura wanders around and a panel at the bottom that shows you energy score and runes carried. Energy decreases every time you come into contact with one of Morgause's many minions.

Morgause's castle is made up of many rooms that are usually split into two levels of floor. Movement off either side of the screen is possible and doorways lead into and out of it. Strewn around the castle are runes and health restoring objects to aid you in your rescue mission.

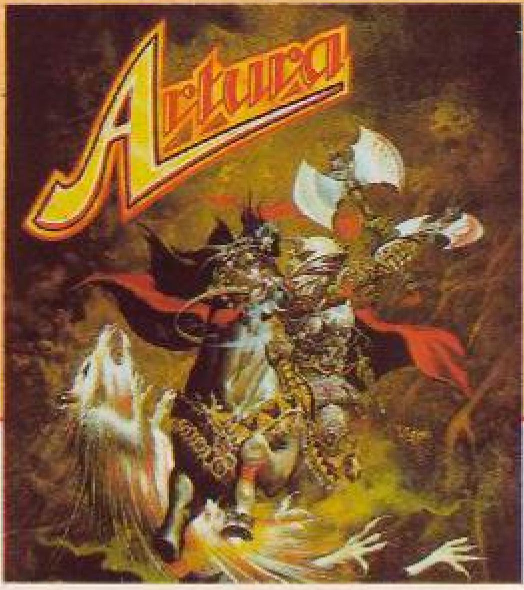
SECOND OPINION

"Artura looks good, though the animation's jerky. And you're kept on your toes by the warriors as you pursue your objective. If you want a mix of Lap of the Gods, Manic Miner *and* The Shining *then Artura fits the bill."* PbM

GREEN SCREEN:
Well, it's green



▲ Hubble bubble, Artura's in trouble



Rats, ghouls, spiders, soldiers and cute little birdy things all want to stop you from finding runes and freeing Nimue. Fortunately they don't like you throwing things at them, in fact it can be very fatal for them, and it doesn't hinder your score either.

On the title screen there's a nice tune that has a certain Arthurian sound to it, but there are none in the game itself. Sound effects are limited – just the impact of your weapon on enemy flesh and the sound of them dying after several hits. Although lacking in colour the graphics are detailed and animation of them is good if not mindblowingly superb. (Gargoyle still hold the title for the best animation of big characters, but at least Gremlin tried.)

There's a large playing area to explore and plenty of foes to kill, though it's a pity they're so thick. It's a game that demands mapping and people will be grabbing for sketch pads before they get anywhere in the game. **GBH**

FIRST DAY TARGET:
1,000 points

AA RAVE

OPERATION WOLF

Ocean ● £9.95 cass, £14.95 disk joystick/keys

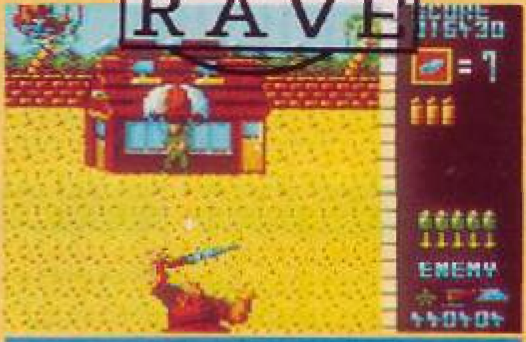
Put your thinking cap back in the cupboard right this minute and go grease up your joystick arm.

Ocean's *Operation Wolf* is here and it's time for mayhem! A tin of boot polish and a headband are not essential, but they'll help you look the part as you set out on a mission to rescue some of your fellow soldiers who very cleverly managed to get themselves captured by the nasty old enemy (boo!) and are being held hostage in a concentration camp. It's down to you, you modest hero person you, to set them free and escort them to safety – reckon you can handle that? You'd better be sure, because if you ain't this is the wrong place to be.



●Another one bites the dust! Just 41 more to go (and three tanks and gunboats!)

If you can you'll have to blast your way through six stages of enemy territory, dealing death to the enemy. Armed with a machine gun and a fistful of rockets *(that's, er, not very many actually – ed.)* you've got a set number of the enemy to kill before you complete the continually horizontally scrolling stages and move on further.



● Let's go crazy and shoot everyone in sight. Healthy?

Targeting the enemy involves moving a cross-hair sight around the screen using either the joystick or keys and then pressing fire, which turns the cross-hair into a bullet hole (or a shower of earth spewing up from the ground if you're aim's a little off).

Mind you, it wouldn't be so bad if all you had to contend with were foot soldiers, but – like life – things are never *that* easy. There are also a set number of helicopters, tanks or gunboats to be destroyed. Polishing off these bigger baddies is not too much trouble if you've still got some rockets left, but if you haven't you're gonna have to rely on destroying them with machine gun fire. Death's not the only thing on your mind, though, because poor innocent defenceless people like nurses, passers-by and small children wander across the screen from time to time. And if you are stupid or callous enough to kill any of these poor, defenceless &c, &c, your energy meter (which runs up the side of the screen) creeps towards the top. Should it reach the top, well, it's game over. Thank you and good night.

Fortunately, you can pick up some life-giving potions by shooting them as they scroll past on the floor. These knock your health meter down a few points – your health meter gets bumped down a few points when you complete a stage as well, so that helps too. You have to shoot ammo clips and rockets as they scroll past on the floor too because your supplies are limited and should you run out of ammo, well, let's just say your life expectancy is not going to be long!

Each level gets progressively harder, and halfway into the game the smart and selfish ones among the enemy even start wearing bullet-proof jackets. Some people, honestly, just show no consideration at all! That only leaves you with one option – shoot 'em in the head!

If you've played the arcade game (and who hasn't?) the first thing you'll notice about the game is how much faster the scrolling on the Amstrad is. That doesn't detract from the fun though, and the rest of the graphics are very colourful and well animated. *Op. Wolf* is manic action all the way: your brain cells won't get taxed but your joystick arm certainly will. AS

First day score:
Complete stage 2

The Verdict

GRAPHICS **94%**
- Fast and colourful.

SONICS **75%**
- Good sound effects.

GRAB FACTOR **95%**
- Instantly addictive and very tough to put down.

STAYING POWER .. **88%**
- The levels start tough and just get tougher.

AA RATING **89%**
- A brillian arcade conversion.

SECOND OPINION

"This is as fast and frantic a game as I've seen in a long time. Fans of the arcade game won't be disappointed – unless you're expecting it to look the same, that is!

Andy's right, too, about the relative peace your brain cells will find: if thinking games are what you're into, forget this one right now.

But if it's excitement you want, come on in and join the fun!" SC

THE SCREEN IN GREEN:
No problem

VIOLENCE IS GOLDEN

There's an argument in the press and on TV a lot at the moment you may have heard about. One side says violence on the telly and in films is wearing down people's ability to understand reality: that watching too many violent pix is likely to make you go out and do something similar. (Michael Ryan, the man who shot more than a dozen people in Hungerford, is often cited as someone who had got carried away with the 'Rambo mentality' – even though, to the best of my knowledge, there's absolutely no proof at all that he was into violent videos in a big way.) Then on the other hand of this argument about violence in the media are those people who say that someone who plays violent video games and watches Rambo films isn't necessarily a zomby. Of course he/she can tell fantasy from reality, they say. These activities merely help to get rid of aggressive emotions by fantasising about them rather than actually go out and carry them outing.

There is little doubt that *Operation Wolf* is a particularly violent game, and though you could say that the fact that you're punished for shooting nurses is a good thing, I'm not so sure.

Still, it sells, doesn't it?

What do *you* think? Write to 'Violent Video', *AA*, 4 Queen St, Bath, Avon BA1 1EJ

BARBARIAN

Psygnosis ● £9.99 cass, £14.99 disk joystick/keys

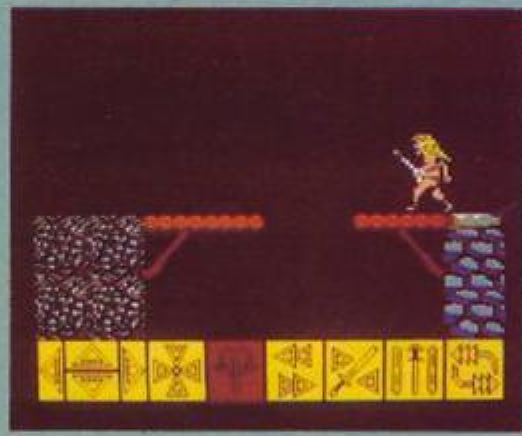
No. This is not Palace's *Barbarian* again, but rather another game with the same name, which appeared first on sixteen bit machines. Palace have a reputation for cover art featuring scantily clad women, but now Psygnosis have gone one step further: there's full nakedness on the cover. Before you get too excited I should explain that the being in question is in fact a dragon. Members of the Society for the Protection of Dragons from Exploitation should contact Psygnosis direct.

Right then, some background, courtesy of the little novella that accompanies the game. (It's a sort of Gothic Coronation Street, so be prepared.) Thoron and Necron are twin brothers who meet an old druid one day as he is wandering through the forest. He befriends them and teaches them to fight with sword, bow and spear. After a year of daily visits the druid turns up as usual, but carrying only the sword and bow. He asks the brothers to close their eyes and when they open them again they feel power surging through their bodies. Necron can cast fire from his fingertips, but is warned never to burn Thoron because the flames would turn back and destroy Necron. The bow is given to Necron and the sword to Thoron. Many years pass and the boys part company, only meeting again much later in a village, during which time nice Necron has turned into a real bad guy. When they meet they fight tooth and claw (sound like normal brothers to me) and eventually Necron is slain. Thoron doesn't have the will power to destroy the soul of his evil brother and so in fact Necron doesn't die, he is merely forced to live underground. Thoron is later killed by a dragon sent by Necron and Thoron's son Hegor swears to avenge his father's death and bring the evil Necron's life to an end. You are Hegor and you wield the sword of your father. Phew! Got all that?

AA RAVE



▲ Take care on the bridge



▲ Arrows waiting to be collected



▲ Hack the werewolf

SECOND OPINION

"This is better than Palace's Barbarian, *in that there's an objective. I always like games which give me a reason to play them and the novella certainly helps. And I like running through a fortress chopping everything in sight: this barbarian's a guy I can sympathise with."* PbM

GREEN SCREEN:
No major problems

The screen is split into a row of icons and a flick screen playing area with a large sprite of you standing at the left. There are ten icons on screen and a further three can be accessed at the flick of a button. Left/right moves you and up/down alters which icon is highlighted. Fire activates the icon. There are four normal movement icons and you can also run. A dramatic forwards or backwards somersault is also possible and you can stop dead in your tracks with another icon. No barbarian would be complete without a sword, however, and this can be wielded menacingly at any monsters. If a monster is too scary then you can turn tail and run, leaving your sword behind in your haste. The extra icons allow you to pick up, drop and select objects. Your lives-score and number of arrows are also shown with the second set of icons. Arrows are picked up later in the game.

Each of the screens that you wander around has one of two types of danger: moving and static. Static ones include sections of ceiling that bash you on the head and sections of bridges that vanish when you step on them. Moving dangers are the toads, werewolves and ghosties of this world. Contact with static or moving dangers are equally lethal. You start with four lives, but in your first few games they won't last very long.

That's one area in which the game lets itself down badly: it's too easy to end up dead unavoidably. Traps have no warning, and so the first time you come across one you're almost guaranteed to lose a life. Monsters may only take one blow to kill, but timing it can be very dodgy. I suppose it's like an arcade game: you die a hundred deaths before you start to recoup your investment.

Graphically *Barbarian* is not technically brilliant and the graphics are in general chunky. There are no tunes, but the few sound effects are good.

There's not really any great depth to the game, which is just a series of problems with basically only one solution to them. Once you know how to deal with them there will be little challenge to the game. This is one of the most obvious examples of a game that you'll only ever bother to complete once. A nice try at cutting a sixteen bit game down to eight bits. GBH

FIRST DAY TARGET:
Complete 20%

The Verdict

GRAPHICS 87%
- Colourful sprites.
- ■ Chunky graphics.

SONICS 31%
- No tunes.

GRAB FACTOR 85%
- Nice mix of icons and hack'n'slay.
- ■ Very frustrating at first.

STAYING POWER ... 78%
- Large playing area and many tricky obstacles to deal with.
- ■ Finish it once and that's it.

AA RATING 81%
- Fun, but lacking in the long term.

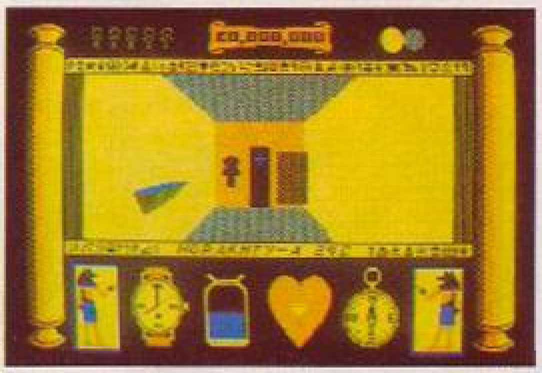
MASTERGAME

TOTAL ECLIPSE

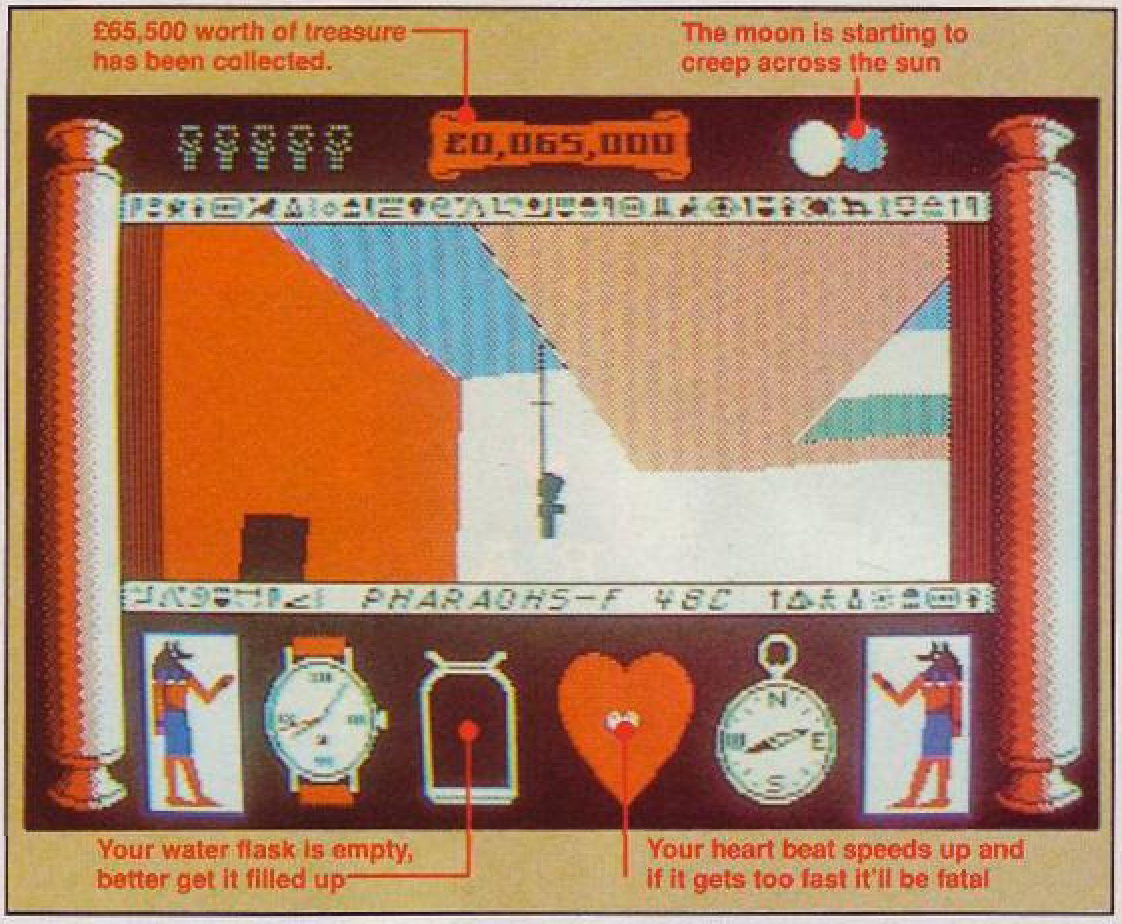
Incentive ● £9.95 cass, £14.95 disk
joystick/keys

Last Christmas's *Mastergame* was *Driller*. In July the sequel, *Darkside*, was also a *Mastergame*. Can Incentive make it three in a row with their latest *Freescape* game?

Evath and Triscupid have been left behind and *Freescape*, the 3D environment you've no doubt heard about (you'd have had to be living on Evath not to!), has travelled back in time to Egypt. The year is 1930, the date is the 26th of October and the time shortly before breakfast (if you have breakfast about 8.15, that is). A total eclipse of the sun is due just before 10am and if you don't do something about it this review won't get finished, because this could be The End of Civilization As We Know It. As the sort of person who finds himself or herself saving the world on a regular basis,



▲ The entrance with trough and ankh



THE ANKHS ARE COMING!

STEVE CAREY talks to Ian Andrew and (right) puts *Total Eclipse* in perspective

In an industry packed with oversized egos and overhyped 'product', finding someone who's got something special but is not inclined to shout about it is rare indeed. *Amstrad Action* tracked down shy and retiring (not yet, we hope!) Ian Andrew and forced him to answer our questions.

AA:* Ian, how would you describe *Total Eclipse?

Ian Andrew: As if the player was the character in *Indiana Jones* in an adventure to stop the curse in a pyramid in Egypt. The first thing you see is the plane outside the pyramid. You've just landed from a nearby village and got out of the plane. Your mission is to reach the shrine at the top of the pyramid before the eclipse occurs and that will stop the curse that would end civilization as we know it.

The legend goes that many hundreds of years ago the Pharoah was angered by his people he set a curse and built the pyramid and said that if anything ever blocked the sun in daylight hours it would be destroyed. The moon is about to block the sun and will explode and shower the earth with meteorites and plunge the earth into ecological disaster.

Did you know when you were finishing *Dark Side* what the next game would be like?

Yes, we'd done a lot of the ground work already. It was very much a team effort. We knew we wanted to set it on earth because people were beginning to think all *Freescape* was good for was abstract space stuff. We wanted more realism – and also put more detail in.

The scale is very different, it seems to me: everything is much more life size, human size than cosmic.

That's right, there's a lot more in it. It's about 70 per cent bigger than the other two games – there's about 50 locations in it. But we're not giving help away this time!

How do you mean?

Well, last time on *Dark Side* people were phoning us up after they bought it asking, 'How do I get this?' So with *Total Eclipse* we're being very strict and not helping.

Who are the Incentive team?

There's Chris Andrew my younger brother, who does the 8-bit coding and programming; Sean Ellis, who does the 16-bit coding and programming; I do the game design and layout of the data; and Paul Gregory, who does the play-testing and a bit of the programming and a bit of the game design.

How do you do your play-testing?

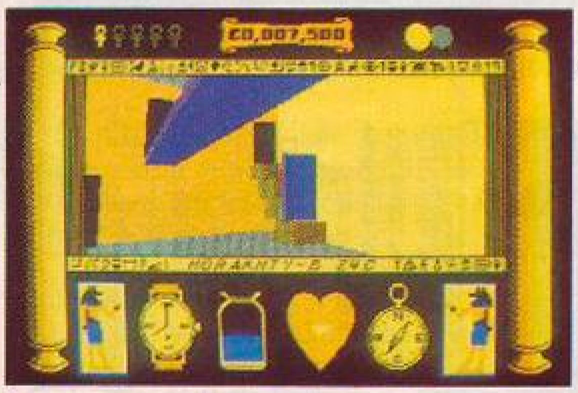
We have various people of differing standards of expertise. From people who've played *Freescape* games before and know all about them, we get their comments and watch them play; down to people like my sister-in-law who either don't like games or haven't played them. We don't give them any prompting and just see how they get on.



● Ian Andrew: 'Every time we do a new game we improve the speed and the compression'

***Total Eclipse* looks faster than *Driller* and *Dark Side* –**

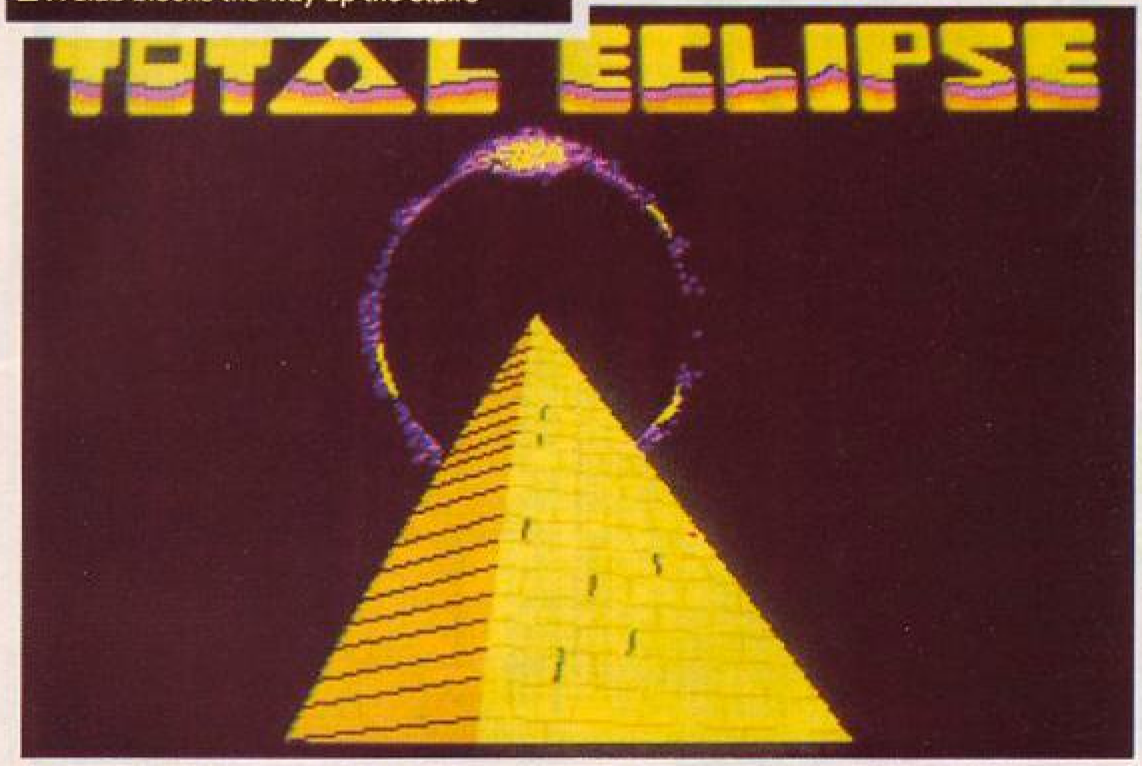
–Yes, every time we do a new game we spend time optimising the speed and the compression so we can get more into it each time, and also make the design more suitable for it. ●



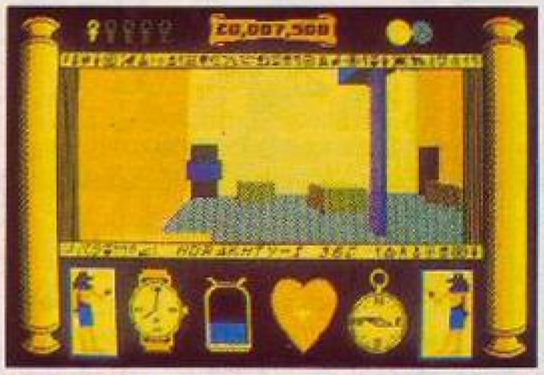
▲ A slab blocks the way up the stairs

you're the ideal candidate to go into the pyramid and smash that shrine. *(For more of the story behind* Total Eclipse*, see the interview with Ian Andrew below.)*

The screen is the now familiar 3D freescape view of the world, while above it there's a moneymeter and a representation of the moon's and sun's relative positions. Any treasures found inside the pyramid increase the moneymeter which works like a score. Below the main screen is a row of heiroglyphics (more on these later) and a row of four icons: a wrist watch, a water bottle, your heart beat and a compass. Water is used up as you explore the pyramid in the heat of an



▲ The loading screen: there's your pyramid – and there's the eclipse, two hours away!



▲ A barred door needs an ankh to open it



▲ Your plane waits outside

Freescape: *Total Eclipse* in perspective





▲ *Driller:* the first Freescape experience and an instant hit





▲ *Dark Side:* the 3D feeling grew stronger – and the time limit more severe!

One little touch that really tickles me and somehow sums up the face of *Freescape* third time round is the high-score. Incentive have put a pound sign in front of it, and although that shouldn't make a scrap of difference, it gives getting a high score a meaning it never really had in *Driller* or *Dark Side*.

It tells us too that we're definitely out of the abstract, space-age 3D and into a recognisably human world. Egypt is an inspired choice: the pyramid, the flat sand and the baking sun are ideal *Freescape* fodder (smooth and monochrome), while the mummies, hieroglyphics and associated hocus-pocus all add atmosphere. This is evident too in the manual. With *Driller* they had to produce a lengthy and, truth be told, rather tedious novella to conjure up a sense of reality; but with *Total Eclipse*, a few paragraphs do the job admirably. You don't necessarily believe in it – in fact it's a load of old camel-droppings – but that doesn't matter in the slightest. It's just something to hang the game on, and as such works perfectly.

Ian Andrew, as you'd expect, is keen to point out the improvements to the *Freescape* system. There's no use pretending that an 8-bit machine is ever going to have the graphics ability of a Quantel Paintbox, but Incentive have tried their very hardest to make the most of what there is. And since they do their development on a CPC, they know the machine and its capabilities inside out.

They've done more than just pay lip service to their policy of continuind improvement: here's a few examples:

- ▲ The face-forward option (key F) saves all that tedious reorientation;
- ▲ There's an equally neat 'U' turn (key U);
- ▲ There are many more puzzles per location, and more locations altogether;
- ▲ There's frequently more than one way to do something, and no 'right' way;
- ▲ The more human scale makes the speed increase possible, but also makes the whole thing appear more realistic.

One thing, though: in the game your heart *slows down* when you accumulate treasure.

Would *yours*?

Egyptian morning and your heart rate increases if you're exerting yourself. Take the heart too far and you'll have to take a rest – a cardiac arrest.

You begin standing outside your plane that has just arrived in the desert. (Doesn't look as if it could've flown here with *that* propeller, though.) The moon is just touching the sun as the approach to eclipse time begins. Look around and you see some sand, some more sand and – *what's that over there?* Yup, some more sand. Quite a lot in the sand department, really. Fine if you're in the egg-timer business, not so good if you're trying to eat a cheese sandwich. Fortunately this featureless waste is relieved by a whacking great pyramid. (Hint: before going in and beginning your mission it's well worth visiting the plane, there's something hidden on it.)

As you enter the pyramid you see two things that are going to be very important to your quest: an *ankh* (Egyptian symbol of eternal life: it's a tall cross with a loop on the top) and a water trough (English symbol that there's no tea available). *Ankhs* are used to open up parts of the pyramid that are otherwise blocked, while water is needed to keep your water flask topped up. If it becomes empty your heart rate increases. At any time you can rest to reduce your heart rate, but this naturally takes time, and the eclipse draws ever closer. Collect *ankhs* by bumping into them and fill your water bottle by touching the trough.

The row of heiroglyphs between the playing area and information panel aren't all useful, but many are. They show which direction you're moving, whether you're crawling or walking, how big your steps are, the size of angle, and there's a gun or pyramid to show whether you're in fire or walk mode and also the name of the location to help in mapping.

Inside the pyramid you'll find big chests (not the *Barbarian* or *Vixen* kind) and urns. Touching an urn or chest gains you money. The chest must be opened first – shooting it with your revolver does the trick. There are some other vaguely coffin shaped objects in some rooms and surprisingly enough they often contain mummies. These are no ordinary mummies though, because these mothers can spit acid if you get too close, and hardly surprisingly this does your heart no good at all.

The pyramid has some 50 locations, with considerable variations in size. Some areas are blocked off until you've solved a problem, and you'll gradually start to work your way upwards.

Many problems are heiroglypics on walls: they're usually in pairs, and shooting one changes something in the room with the other heiroglyph. It might for example open up a secret door, slide a wall across or disarm a trap.

Certain sections of the pyramid have pressure pads on the floor that can be lethal, setting off poison darts that get your heart pumping disastrously. It's essential to look down when you enter a room, because the floor could be a good distance away. Most drops aren't fatal, but none of them are exactly healthy. Some parts of the pyramid do things when they're shot, in good old fashioned *Driller* style.

It's not absolutely essential to make a map, but it definitely makes things easier. Unfortunately, however, the floors aren't all on the same level, so a bit of 3D mapping is necessary. Keep looking around, because you'll see ankhs, traps and loads of other things on the floor, ceiling and high up the walls. Control is very similar to the other two *Freescape* games, but there's a useful extra control (the F key) to face you forward again if you've confused yourself as to which way the floor is. There's also the essential save and load game options.

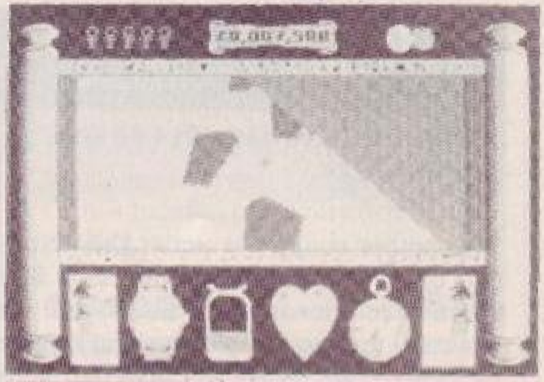
It can't honestly be claimed that there's been a vast improvement in the already extremely high graphics quality of *Total Eclipse's* two predecessors, but on the other hand speed has increased. Things are still angular and smooth, but this is a trade-off against speed of screen refreshing. One relatively minor complaint must be made for the third consecutive time, and that is that sound is still uninspiring, being limited still to a mere handful of effects and no tunes. Incentive plainly feel that the memory required to create good in-game sound is simply not worth the sacrifice.

Incentive continue to improve their system and their games just go from strength to strength. This time round there are more problems to solve and a 66% bigger playing area to explore, making the objective even more challenging. There is also more than one solution to most problems, making it possible to solve the game in many ways. You could even go back for another go and try doing it another way.

If you've seen either of the two previous *Freescape* games you will need no persuading that Incentive have something really special. When we tell you that the extra locations, puzzles and added speed make *Total Eclipse* a faster moving and even more exciting adventure than *Driller* and *Dark Side* put together, you should be convinced. And if by any chance you've so far not had the pleasure of *Freescape's* acquaintance, wait no longer.

Total Eclipse: now you know what you want for Christmas. GBH

FIRST DAY TARGET:
Collect £125,000


▲ Exploring inside the pyramid

SECOND OPINION

***"Once in a while – it seems to be at about six month intervals – we get a game that I just can't wait to get home and play all evening, Sportsnight or no Sportsnight. This time last year it was a little thing you may remember as* Driller. *Six months ago it was* Dark Side. *Now it's* Total Eclipse.**

It's still* Freescape, *of course, and if you hated either or both of the others then it's unlikely you'll be converted by this one. But I've yet to meet anyone who falls into that category (write to us at the usual address, I'd be amused to hear from you)."

SC

THE SCREEN IN GREEN:
No problems, though you're missing a colour treat

The Verdict

GRAPHICS 91%
- Good perspective very real environment.
- Shading makes it look more colourful.

SONICS 34%
- Still needs work in the sound department, lads!

GRAB FACTOR 92%
- Not too tricky to begin with, but things get tougher as you get further into the game.
- Few instant-deaths which can put you off a game.

STAYING POWER ... 95%
- 50 locations to explore and two hours of real time to do it in.
- More puzzles to solve and many ways to solve them make it less trial and error and more fun.

AA RATING 93%
- The best of the three Freescape games. More puzzling and things to do.

GUERILLA WAR

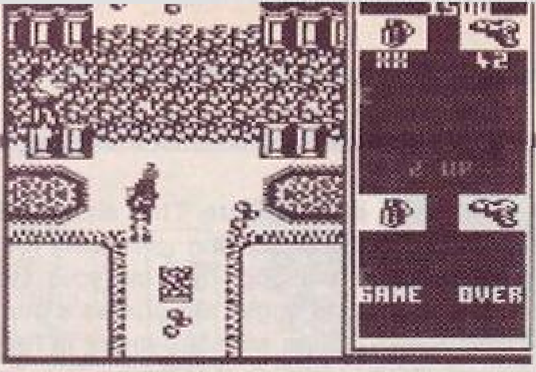
Imagine ● £9.95 cass, £14.95 disk joystick/keys

Yet another country is under the domination of an evil and cruel oppressor. Some brave revolutionaries decide to rid their beautiful and war torn homeland of tyranny. One or two rebels can take part simultaneously in this scrolling game of gratuitous violence.

After the number of players and controls have been selected the first level is loaded from tape or disk and subsequent levels are likewise loaded. Fine for disk, but can be irritating for tape users. They'll just have to get used to it though because more and more games are often multi-loaded nowadays.

The right of the screen is a status area for each player. Health, ammunition, grenades and score are shown here. Health decreases with every hit you take until it's time to meet your maker (the demi-god Shu-te-mup). The rest of the screen has the scrolling playing area in which you massacre the oppressive hordes of enemy troops.

You have two weapons at your disposal: grenades and a gun. The former is more destructive, but you only have 50. Bullets are in infinite supply (very large magazine on the gun). In places there are tanks that you leap into and drive around in (not in the slightest reminiscent of *Ikari Warriors* is it!) and blast away at your foes from.



▲ A hostage tied to a post in 'a poor person's *Ikari Warriors*'

They're armed with similar weapons and they stand around in tactical positions waiting to blow you apart. They're not very intelligent though and tend to stand in one spot shooting at where they hope you'll go, pretty standard stuff for a shoot-em-up really.

Graphically it's disappointing with ill defined sprites. Colour is used poorly and just makes the screen look untidy and glaring. Sound is bad too with indistinct effects, but a reasonable tune on the title screen.As a shoot-em-up it's not that bad, but then again it's not a wonderful game either. Although this and *Victory Road* are very similar in concept the execution of *Victory Road* is better and so if came to a choice of the two go for *VR*. **GBH**

SECOND OPINION

"Running through a jungle and shooting the opposition to the revolution. Exciting? Nope, afraid not. **PbM**

GREEN SCREEN:
Not so glaring

FIRST DAY TARGET:
Score 5,000 points

The Verdict

GRAPHICS 59%
■ Flickery graphics.
■ Gaudy colours.

SONICS 53%
□ Good title tune.

GRAB FACTOR 59%
□ Two player blasting.
■ Too tricky to begin with.

STAYING POWER ...52%
□ Five levels plus and end of level enemy.
■ Blast, blast, blast!

AA RATING 54%

■ A poor person's *Ikari Warriors*.

VICTORY ROAD

Imagine ● £9.95 cass, £14.95 disk joystick/keys

With simultaneous two player action and a vertically scrolling screen packed with nasties just waiting to kill or be killed, this looks like *Ikari Warriors*. There are a few extras thrown in for good measure.

SECOND OPINION

"Now if you've got to have Ikari Warriors clones, make 'em like this. Terrific!" **SC**

THE SCREEN IN GREEN:
fine

The playing area is in the centre of the screen and this scrolls downwards. On either side of the playing area is a score panel and the number of lives left for each player. You begin the game with six lives.

Your objective is to kill as many aliens as possible and generally blast your way to the top of the high score table. A truly original concept for a game is very rare, and this isn't one of them. You're armed with a gun, you've taken your shirt off because you're 'hard' and you're in a mean mood. Monsters beware!

Each level is several screens high and is a mixture of open terrain and obstacles that get in your way. Some obstacles can be blasted out of the way, but others are so stubborn that they just sit there and look undamaged. There are also some other objects that can be collected to enhance your firepower. Some obstacles can only be destroyed with a more potent weapon than the standard gun.

Your friendly neighbourhood foes come in several flavours: vampires, little green things, floating heads, spiders and more. They're tough little critters though and they take a single hit to blast, except for the heads which linger and lurk doing their best to stay in one piece. You have as much resistance to them as they do to you, one hit loses you a life. Run out of lives and it's game over.

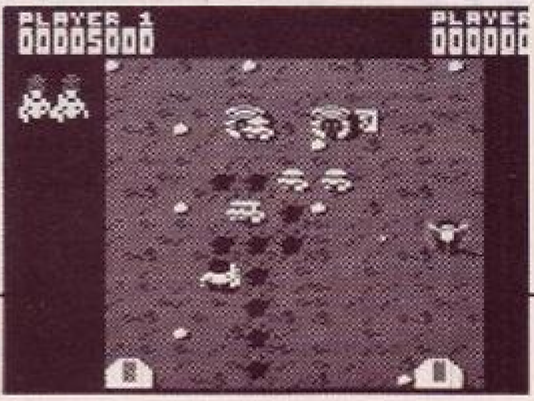
That's about it as far as gameplay goes, you walk around killing bad guys or you can walk with a friend and kill-em together. When you come across one the green squares you can go through and battle a big head, after which you return to the surface and shoot more little guys.

The scrolling is smooth and the graphics colourful if a little lacking in detail. There are no tunes, but the sound effects are very good.

Even though *Ikari Warriors* is considerably older it has the edge, but that doesn't mean that *Victory Road* should be completely ignored. Have a look at the two and then make your choice if you want a gratuitous shoot-em-up for Christmas, both are very good games.
GBH

FIRST DAY TARGET:
20,000 points

▼ Out for a stroll down Victory Road



The Verdict

GRAPHICS 72%
□ Smooth vertical scrolling.
□ Colourful sprites and backgrounds.

SONICS 41%
□ Good effects.Pity there's no tunes.

GRAB FACTOR 78%
□ One or two player game.
■ Heads are tricky to deal with initially.

STAYING POWER ...69%
□ Loads of aliens to deal with.
■ Repetition will get to you eventually.

AA RATING 74%

□ Not mind blowingly original, but plenty of fun to be had in slaying things.

GARY LINEKER'S SUPER SKILLS

Gremlin ● £9.99 cass, £14.99 disk
joystick/keys

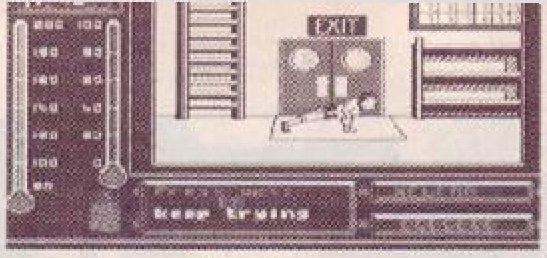
The likeable and once prolific Leicester lad's first foray into computerworld was *Gary Lineker's Superstar Soccer* (AA29: 66%). My, how things have changed! Now, while our Gazza is out there at Barcelona striving to get onto the score-sheet (and occasionally meeting up with Robbo and the lads to get another hard-earned goalless draw against some soccer nonentity), Gremlin release the second. The emphasis has shifted from tactical and arcade-like action to a waggling game that trains a budding electronic footballer.

From one to four players can take part and there are two major sections to the game: in the gym and field work. The gym section has four events: press-ups, squat thrusts, weightlifting and monkey bars. Field work consists of dribbling, chipping, shooting, penalties and ball juggling. In each event you have a certain amount of time in which to complete it, and there's also a maximum time limit by the end of which you must have completed all the training. A timer on screen shows you how much time you have left to complete the event and the game.

All the gym events are pure waggle, with subtle differences between the events. By subtle I mean the direction that the joystick is being moved changes from horizontal to diagonal to vertical. Sophisticated stuff!

Once you've gone through the gym it's time to go out onto the pitch and kick some ball. Dribbling, chipping and shooting are all very similar in play – just a matter of running around with the ball and kicking it occasionally. A sight is used to decide where the the ball's supposed to go and then you give a good kickin'. Finally there's ball juggling in which you press the appropriate numeric key to get that ball bouncing.

Graphics are bright, but not colourful with good animation. Sound is decent enough, if a little simplistic. An nice tune that's somewhat reminiscent of *Deflektor* plays on the title screen, but there are no tunes in the game itself.



▲ Get those muscles going

SECOND OPINION

"This gym joystick-waggling business requires a high boredom threshold I don't possess, and the point never seems very clear. Still, there must be enough people out there who love nothing better than a good waggle... But why?" **SC**

ON THE GREEN PITCH:
duller, but playable

The Verdict

GRAPHICS 71%
- ☐ Well animated and no flicker.
- ■ Only a handful of colours (excluding thumb).

SONICS 61%
- ☐ Brilliant title tune.

GRAB FACTOR 67%
- ■ Once you start doing badly things get even worse.

STAYING POWER ... 62%
- ☐ Plenty of events to play through.
- ■ Tedious after a while.

AA RATING 64%
- ■ The skills section of *4 Soccer Sims* is better and you get a soccer game too.

Gary Lineker's Superstar Soccer mixed the strategy and arcade elements together well, but *Super Skills* lacks the essential ingredient to make it stand out. Some of the gym events are bit too tricky: they seem impossible and you just sit there waggling to no avail. It would have been much better to introduce the player gradually to the game rather than throw him in at the deep end immediately. GBH

FIRST DAY TARGET:
1,000 points

THE PEPSI CHALLENGE

US Gold ● £9.95 cass, £14.99 disk
joystick/keys

Take a can of the fizzy stuff, throw in a team of programmers, ask them to come up with a game, shake them all up and what do you get? A sticky mess, or a *Pacman* variant?

You play a small blobby thing on legs that wanders around mazes eating pills and avoiding ghosties (sound familiar?). There are plenty of mazes to go through and some zap-game bits to make it a little different/wierder.

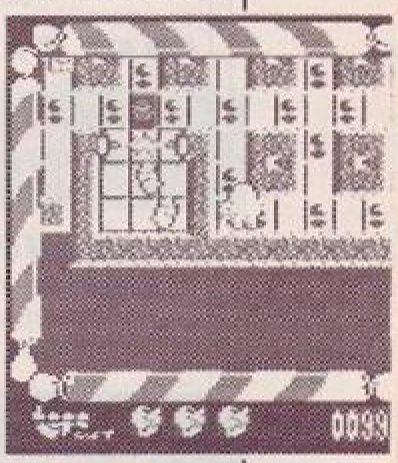
Most of the screen is taken up by the four way scrolling playing area and a score and lives panel. The playing area itself is very large for each level, covering several screens.

The zappy bits come in the form of special corridors in the mazes you can enter and when inside you change into a laser base and can blast any ghosts, *Space Invaders* style, that come too near. *Pacman* has power pills and this has squares that change you into something else: big hump-backed things and little red guys are two of your forms.

On the title screen there's a brilliant little ditty and there are also the occasional tunes within the game itself – losing a life provides one. Sound effects are well done. The graphics are colourful and nicely animated, with some humorous sprites.

Not the most original or difficult game, but it's pretty and it should keep younger players busy and happy for many hours. Maybe a little overpriced, but still worth considering. GBH

FIRST DAY TARGET:
30,000 points


▲ Stomp the ghosts in humpy form

SECOND OPINION

"Must take issue with Gary on this one. I enjoyed it, and so will anyone who doesn't demand lots of ketchup and vigilante violence with their games. Recommended." **SC**

GREEN SCREEN:
Tricky once in a while

The Verdict

GRAPHICS 73%
- ☐ Bright and colourful with cute sprites.
- ☐ Smooth four way scrolling.

SONICS 64%
- ☐ Nice tunes and functional sound effects.

GRAB FACTOR 67%
- ☐ Simple to play. Ideal for younger readers.
- ■ Perhaps a bit too easy though.

STAYING POWER ... 64%
- ☐ Plenty of mazes to go through.
- ■ Lacking in sophistication.

AA RATING 65%
- ☐ Great fun and no blood...
- ■ but vigilantes won't enjoy it.



HOW TO BE A COMPLETE BASTARD

Ricochet ● £1.99 cass
joystick/keys

Deep down there's a part to most of us that just loves to be nasty to people, and being rude and obnoxious is one of the most common methods. If that sounds like your idea of a good time, or your idea of a great scenario for a CPC game, then you may get some satisfaction from playing this game, and if you're too shy to be nasty ask them to put the game in a brown paper bag when you buy it and then play it in secret.

The story goes that you have gatecrashed a tupperware party (only joking, it's a guppy. *Isn't that a fish?* Ah yes, quite right, sorry it's a yuppie party.) and you want the place to yourself. The only way to do that is by driving the guests away and what better way than by being a real barsteward to them.



● What a jolly anarchic game!

Around the split view playing area are four meters: **drunkometer, weeeometer, fartometer, smellometer,** and your score. No explanation of the meters is necessary, and indeed they give a good indication of the level of humour in the game: i.e. bottom level (pun intended). To know whether *HTBACB* is for you, try this simple test: say those four meter names out loud. Did you laugh? If you did, then you'll love the game. If you didn't, congratulations: you're a member of the human race.

You have at your disposal three essential items in infinite supply: curry, alcohol and coffee. One helps build up your gas power, another gets you drunk and the last sobers you up.

All over the house are objects you can cause mischief with. They range from the humble hammer and meagre match to the sadistic superglue (for the loo) and cunningly concocted custard pie. Some things – itching powder for example – cause a guest to leave, but they come back after a while, whereas the superglue in the loo trick, not surprisingly takes the guest out for ever (what a way to go!). When a guest leaves one of the letters at the bottom of the screen lights up and if all sixteen are illuminated then you've won the game.

The room graphics are fairly dull and all look very similar and the sprites themselves wander around badly and are poorly drawn. On the title screen there's a good tune, but in the game all you're likely to hear are farting sounds.

If you don't like yuppies, love to drink, enjoy making rude noises with various parts of your anatomy and have two quid to spare then you can do far worse than buy this game. GBH

FIRST DAY TARGET:
Make five guests leave

IMPORTANT WARNING

Remember, kids, Adrian only gets away with swearing because he's a Lovable Rogue. Don't imitate him: swearing at home could seriously damage your pocket money.

HISTORY LESSON

"About 400 years ago there was a TV series called The Young Ones. *They made jokes about bottoms and everyone said they were 'alternative'. Now the actors are grown up and married and that, but their youthful excesses return to haunt them – such as when a software house re-releases a game you foolishly got involved with all that time ago. Wonder what Jennifer thinks about it? (Oh what a giveaway for our competition!)*

Oh, one more thing: The Young Ones *was extremely funny."* SC

GREEN SCREEN:
fine

Tasteless jokes

VOM GRAPHICS 49%
- Dull and boring rooms.
- Badly animated sprites.

FARTING SONICS 42%
- It farts.

PUKE FACTOR 67%
- Unsuitable for those of a delicate disposition.
- Being obnoxious is fun for several games...

SMELLING POWER 53%
- Wears a bit thin though after a while.
- Driving all the guests away is no simple matter.

AA RATING 72%
- Juvenile humour, but great fun for £2.

WIN AN EVENING WITH ADRIAN EDMONDSON
SECOND PRIZE: TWO EVENINGS

Ricochet, who are re-releasing their game based on the book by Ade Edmundson, *How to be a Rather Unpleasant Person* (Steve won't let me use the word Bastard) and are full of Christmas spirit, find they have 25 copies of the game and the book they want to offload on you, our legitimate readers.

All you have to do is answer the following four simple questions.

1) What sort of party is Ade trying to wreck?
a) Yuppie b) Guppy c) Tupperware

2) Ade Edmondson also starred in the TV series *The Young Ones*. What was his name in the series?
a) Jane b) Tara c)Vyvyan

3) Who is Ade Edmondson married to?
a) The Queen b) Jennifer Saunders c) Pat McDonald

4) How many issue 35's of *AA* have there been? *(Ok, anyone can make a mistake – ed) (but what about the two Septembers as well? – not the ed)*
a) None b) Two c) Too many

Send your name and address ON A POSTCARD OR THE BACK OF AN ENVELOPE to: *Slightly Naughty Comp, Amstrad Action,* 4 Queen Street, Bath Avon BA1 1EJ. Closing date is January 10th 1989. The first 25 entries with anything written on them which we pull out of the turkey's ribcage receives a copy of the game and the book.

TRIVIAL PURSUIT - a new beginning

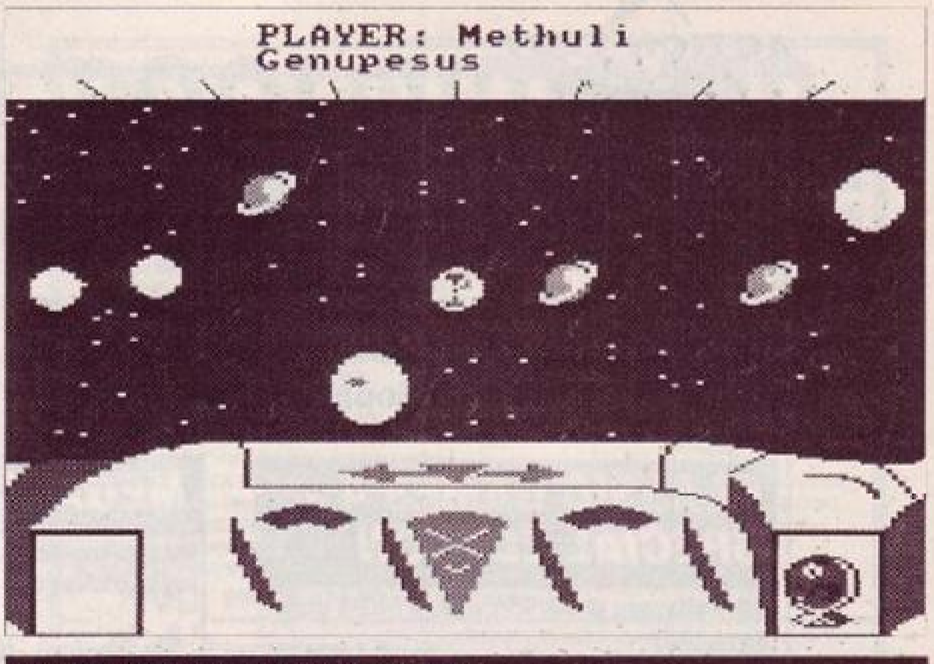
Domark ● £14.95 cass, £19.95 disk joystick/keys

Not long ago there was a playing board, six different colours of counters and a thousand cards with six trivial questions of different categories on each. The categories were science and nature, entertainment, art and literature, geography, sports and leisure, and history. The aim was to wander around the wheel shaped board collecting coloured wedges and then head for the hub and answer one more question. Winning was not important (except to the eventual winner): the real purpose of *TP* was as a fun party game for people frightened of intelligent conversation.

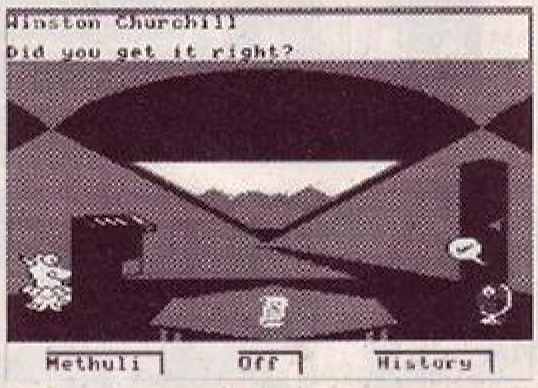
Influenced, no doubt, by the ludicrous amounts of money pouring into their bank accounts the designers decided to bring out some expansion sets of questions and charge extortionate amounts of money for them. They too sold incredibly well and the game and expansion sets inevitably came out on home micros.

In this latest addition to the *TP* craze there's a slight variation on the gameplay, and even a scenario. In the distant future the earth is dying and mankind must find a new place to live. The planet Genus II seems ideal, but the inhabitants don't want any old idiots moving in as neighbours and create a test. Hidden around six different galaxies (one for each question category) there are six objects (futuristic equivalents of wedges) that must be found and collected by answering a question set by the alien lifeforms that live on the planet. Once all six objects have been found you can go onto Genus II where you're asked a question by six of the wisest beings on the planet. If you answer all those questions correctly you have found a haven for the earth people and can live happily every after.

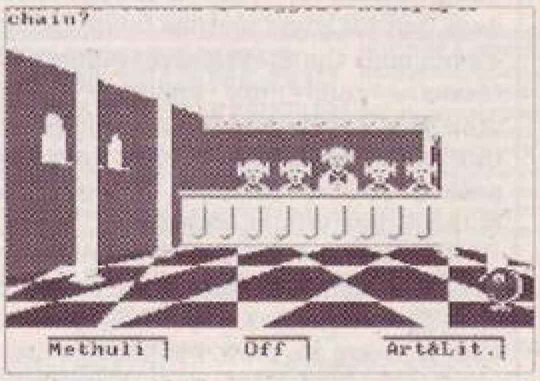
As with the original *TP* up to six teams or players can take part and you take it in turns to answer questions. Extra goes are awarded if you get the answer right. Dice are no longer rolled to move from one planet to another: you can select your destination by simply moving the cursor over a planet and pressing fire. When you land on a planet a question is asked and you press a key when you've decided what your answer is. The correct answer is shown and you have to be honest and tell the computer whether you got it right.



▲ A View of the galaxy. Where is that item?



▲ Get the question right for an item



▲ The elders set your final question

(This is fine when there are several players, but in solo play I found the temptation to cheat irresistible.)

The question categories are the same, though there are are some audio and visual questions too (both can be switched off).

Graphically it's not devastatingly exciting, but they serve their purpose. There are no problems with the graphical questions. Sound effects are adequate and the tunes on the musical questions are played well.

Trivial Pursuit is a game you come back to occasionally, and as long as you don't have a perfect memory for trivial details the 3,000 questions keep you going a long time. As a game for the family over Christmas it's ideal, but for solo play it lacks compulsiveness. **GBH**

SECOND OPINION

"What's with these TP *spinoffs anyway? There was the book, now there's another micro version. Don't let Domark fool you his really is a new beginning – that's just marketing.*

The little aliens are fun, the questions aren't bad and unlike Gary I found no difficulty in being honest about whether I'd got the answers right. If you're a fan of the original you'll enjoy this too.

And I think Gary's right: as a Christmas family get together game it's fun, but you won't find yourself playing it alone very often.

One last thing: it's too expensive." **SC**

GREEN SCREEN VIEW: No problems

The Verdict

GRAPHICS 59%
- □ Colourful graphics.
- □ Cute little aliens.

SONICS 53%
- □ A few tunes for questions.
- ■ Average sound effects.

GRAB FACTOR 67%
- □ Fun for a family gathering.
- ■ Useless for solo play.

STAYING POWER ... 73%
- □ 3,000 questions supplied.
- □ As long as you don't have a photographic memory you'll still drag it out for an occasional game.

AA RATING 69%
- □ Fine if you don't have a trivia game already...
- ■ ...but not original enough if you do.

Q. ENTERTAINMENT:
Q. How many times did Fred and Ginger team up in films?
A. Ten times

HISTORY:
Q. What King George died in 1830?
A. IV

SPORT AND LEISURE
Q. Over what distance did Carl and Ben battle for half a million in Zurich?
A. 100 metres

ART AND LITERATURE
Q. What colour is Jack Sprat's cat?
A. Black

A COMPILATION OF COMPILATIONS

Bundled games are often excellent bargains and the cheapest way to build up your collection – if you don't mind waiting for the big names to filter down to you! GARY BARRETT tears the cellophane off a few of the biggest Christmas boxes around

CLASSIC GAMES 4 - SPECIAL EDITION

CP Software ● £9.95 cass, £14.95 disk keys only

Compilations are common enough these days, but for some reasons board games – even ones that have been notable successes – rarely get bundled. Chess, draughts, backgammon and bridge are the four mind games thrown into this package to keep you busy through some of these dark winter nights.

3D Chess was *Raved* (*AA*9) and proved a tough opponent for ex-editor Pete Connor. It has a good 3D display and is a joy to play, but suffers from absolutely abominable speech synthesis – or 'ablobloloblöble bleep blinbleblib', as it would call it. *Bridge Player 3* (*AA*8: 58%) is reasonably laid out and has a challenging opponent for both beginner and intermediate level player. (Beginners will need a book or they won't know what the heck is going on.) *Backgammon* and *Draughts* are previously unreleased titles.

A pile of thoughtful play here. It may not appeal to the arcade game fiend, but anyone who wants a game of something more mentally stimulating than a mere test of dexterity should find this a cheap and worthwhile purchase. GBH

GREEN SCREEN VIEW
No problems



● 3D Chess

AA RATING 64%

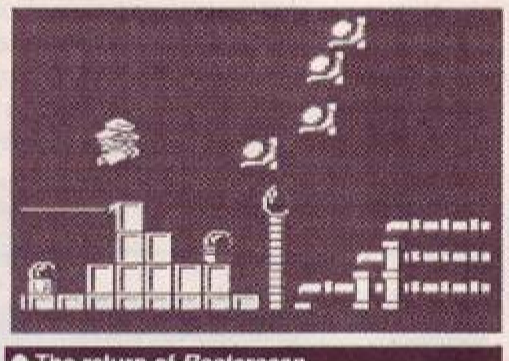
Four games for the player more concerned with mind than fast reactions.

MEGAPLAY VOLUME I

Mastertronic ● £9.99 cass, £14.95 disk joystick/keys

Six budget games burst out of the archive: *Agent X II* (*AA* 28, 38%), *Zub* (*AA* 16, 76%), *Rasterscan* (*AA* 21, 88%), *Destructo* (*AA* 25, 77%), *Curse of Sherwood* (*AA* 21, 68%) and *180* (*AA* 17, 67%).

A mixed bag ranging from the straight shoot-em-up of *Destructo* to the arcade adventure style of *Curse of Sherwood*. There's even something for fat, heavy smoking alcoholics (professional darts players) in the form of *180*.



● The return of *Rasterscan*

The total for all of these games separately would come to just about £18, so £10 is well worth it if you haven't got more than two already. GBH

GREEN SCREEN VIEW
Fine

AA RATING 73%

A cheap stocking filler (for all you people with cheap stockings).

HISTORY IN THE MAKING - THE FIRST THREE YEARS

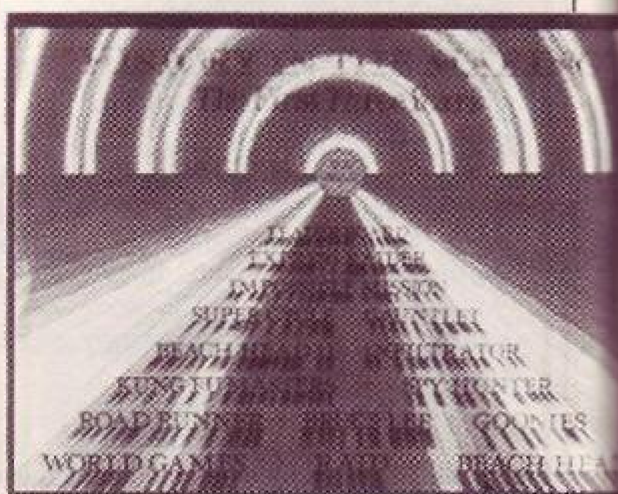
US Gold ● £19.99 cass, £24.99 disk joystick/keys

US Gold, who've around since July 1984, have decided to celebrate their third anniversary after four and half years. Well, it makes sense to them.

History in the Making is a truly awesome and appropriately gold-coloured package of 15 games from that three year period: the much-repeated *Leaderboard* (*AA* 21, 83%), which seems to be out on one compilation or another virtually every week, *Express Raider* (*AA* 21, 53%), *Impossible Mission* (*AA* 13, 85%), *Super Cycle* (*AA* 20, 71%), *Gauntlet* (*AA* 16, 93%), *Beach Head II* (*AA* 15, 42%), *Infiltrator* (*AA* 16, 75%), *Kung Fu Master* (*AA* 11, 72%), *Spy Hunter*, *Road Runner* (*AA* 26, 74%), *Bruce Lee* (*AA* 2, 88%), *Goonies*, *World Games* (*AA* 23, 70%), *Raid* (*AA* 2, 89%) and *Beach Head* (*AA* 1, 82%).

Amongst that lot there are quite a few *Raves* and only one real turkey – *Beach Head II*. Admittedly there are some decidedly average games too, and the bundle is very expensive, but if you've only just got your CPC then you'll get plenty of entertainment from this pack. Even if you do have some of the games already then it might still be worthwhile, since they work out at a paltry £1.67 each game for disk and £1.33 for tape. GBH

GREEN SCREEN VIEW:
No problems



● Welcome back *Spy Hunter*

AA RATING 71%

Enough games to keep you going until the spring – at least!

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THUNDERBLADE

US Gold ● £9.99 cass, £14.99 disk joystick/keys

US Gold's major push for Christmas is a helicopter shoot-em-up in twelve stages. Your mission is to destroy an enemy fortress – only trouble is, the enemy themselves aren't too keen on the idea. 'Hold onto your stomachs', you're told, 'unscramble your brains for the journey of a lifetime as you take the controls of the most advanced 'chopper armaments specialists could ever conceive – outmanoeuvre the fastest jet fighter, outgun the most dangerous gunship! Traverse the war-torn skyline of a skyscraper city as you sharpen your skills for the battle ahead. Plunge out to sea for an epic encounter with an immense, heavily armoured gunship. Race on to a shoot-out in the rocky canyon and dense forests, where your flying expertise is tested to the limits as you dive, hover and skillfully manoeuvre your way through this fortified maze!'

Phew, quite a brief: but how does it translate into gameplay?

The view of your surroundings varies according to which stage of the game you're playing. There are 12 stages in all, some viewed from above and others from behind. Your helicopter is always central on the screen and what you see depends on how high up you are. The size of the helicopter remains constant and enemy vehicles and buildings change in proportion. There's also a score panel and lives indicator to remind you of how well (or badly) you're doing.

Stage one is viewed from above and your objective is to reach the end of the level blasting as many enemies as you



▲ An overhead view of the first level

can and avoiding their fire. Helicopters, though, even Thunderblade, are easy to knock out of the sky (ask Mike Smith). You're armed with bombs and bullets, the latter destroy things more easily.

In stage two the setup is virtually the same only this time you view the world from behind the helicopter. Buildings become more dangerous as you fly towards them and occasionally you lose sight of everything when a bomb explodes in front of you.

The third stage is set out in the middle of the ocean over a huge ship. Gun emplacements are scattered across the ship and must be dealt with before they get you. This section is also viewed from above, like the first.

Later stages of the game get progressively more difficult to complete: the fourth is set in a canyon filled with hostile forces and jagged outcrops of rock, while later stages have enemy boats to blast and hordes of screaming jets. Eventually you'll reach your ultimate objective, the heavily defended enemy fortress which is going to take an unbelievable effort to destroy.

Thunderblade in the arcades had two things going for it: graphics and sound. With all arcade conversions the process of getting a game from the arcade onto a home micro is not easy



▲ Oops! We just crashed into a building



▲ Stage two: now you're behind the 'chopper



▲ Stage three: attacking a ship

and eight bit micros especially suffer from the transition. The graphics are good and sound effects are up to scratch, but don't expect the same game on your humble CPC as you saw in the arcade, or you'll be sorely disappointed.

I'd speculate that it won't be too long before arcade conversions become impossible on the eight bit micros because of the sheer processing power required to get some of the games running. But as long as arcade conversions are made they will continue to sell. And US Gold will no doubt be continuing to sell them. If you want to see what they look like, try *Thunderblade*. GBH

FIRST DAY TARGET:
80,000 points

SECOND OPINION

"Thunderblade is the sort of game its fans will love – by which I mean that those who really thrill to 8-bit conversions of coin-op arcade games will need no further recommendation." SC

GREEN SCREEN:
Tricky in places



The Verdict

GRAPHICS 69%
- Terrain moves well in all viewing modes.
- Bright and colourful graphics.

SONICS 59%
- Good title tune.
- Explosive in-game effects.

GRAB FACTOR 78%
- Grab a stick and blast away.
- Speed control is ackward initially.

STAYING POWER ... 73%
- Twelve increasingly difficult stages to complete.
- Kill some bad guys, kill some more, and then more...

AA RATING 74%
- Not a turkey, but no award winner either.

Amstrad Action? Amstrad Action!

Amstrad CPC Games

		cass	disc
1943	U S Gold	8.49	12.74
3D Voice Chess	C.P. Software	10.23	12.60
6 Pack Vol. 3	Elite	7.86	11.81
A.T.F.	Digital Int	7.07	11.02
Acrojet	Microprose	7.86	11.81
Action Force	Virgin	7.07	
Aliens (U S Version)	Activision	7.89	11.84
All New Blockbusters	Domark	6.28	11.81
All Stars	The Edge	7.10	
Alternate World Games	Gremlin	8.49	12.74
Annals of Rome	P S S	10.23	14.18
Arcade Force Four	U S Gold	8.49	16.99
Arkanoid	Imagine	7.07	11.81
Backgammon	C.P. Software	4.70	7.86
Bad Cat	U S Gold	8.49	12.74
Barbarian	Mastertronic		7.89
Batman	Ocean	7.86	11.81
Battle of Britain	P S S		7.86
Battlefield Germany	P S S	10.23	14.18
Beyond Ice Palace	Elite	7.89	11.84
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Blood Valley	Gremlin	8.49	12.74
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Bridge Player 3	C P Software	10.23	12.60
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Bulls-Eye	Domark	6.28	
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Cluedo	Leisure Genius	7.86	11.81
Colossus Bridge	C D S	9.44	11.81
Colossus Chess 4	C D S	7.86	11.02
Colossus Mah Jong	C D S	7.89	11.84
Combat School	Ocean	7.07	11.81
Computer Hits 4	Beau-Jolly	7.86	11.81
Conflicts	P S S	10.23	14.18
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Elite	Firebird	7.86	10.23
Elite Collection	Elite	11.81	15.76
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Enduro Racer	Activision	7.89	11.84
Epyx on Amstrad	U S Gold	8.49	16.99
Evening Star	Hewson	7.61	12.71
Every Second Counts	Domark	6.28	10.23
F15 Strike Eagle	Microprose	7.86	11.81
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Fists 'n Throttles	Elite	10.26	11.84
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Flintstones	Grand Slam	7.07	11.81
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Football Director 2	D&H Games		15.79
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G Gooch Test Cricket	Audiogenic	7.86	11.81
Game Set & Match	Ocean	10.23	14.18
Game Set & Match 2	Ocean	10.23	14.18
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Gary Linekers Footbal	Gremlin	8.49	12.74
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Out Run	U S Gold	8.49	12.74
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Paperboy	Elite	7.07	11.81
Pawn	Rainbird		15.76
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Pink Panther	Gremlin	8.49	12.74
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4 SOCCER SIMULATORS

Codemasters ● £9.99 cass, £12.99 disk ● joystick/keys



▲ In the gym

Codemasters have finally decided to go for full price games with their new Gold label. This first full pricer is a quartet of football games. Three are standard games of soccer in the *Matchday II* style, while the fourth is a *Decathlon* waggling-type game.

The four games load separately and from one to four players can take part in each. All the soccer games have basically the same layout: a goal at the top and bottom of the screen and a four way scrolling pitch which moves with the ball. A number appears over the head of the player nearest to the ball. Soccer skills is the fourth game and the playing area varies according to which bit of training you're doing.

11 a side soccer is first on the list and here you have two full teams of players with the usual rules for corners, throw-ins, penalties, fouls, goalkicks and offside. There are three difficulty levels to play at: easy, medium and hard. On easy the computer is a walkover; medium is reasonable; and the hard opponent is challenging. The match duration can vary from 5 to 90 minutes, but it's more enjoyable to play over short matches.

Indoor Soccer uses the normal rules for indoor five a side, with no corners or throw-ins, the ball just bouncing off the walls. Street Soccer is basically football without the rules, fouls go unpenalised and the pitch is more irregular with cars and buildings to get in the way.

If there are more than one players



▲ Four player action in 11-a-side



▲ Half-time at 5-a-side

then you can have one of four combinations: player vs player, two players vs computer, two players vs one player and two vs two. The extra options add to the fun in the same way that a similar option in *Matchday II* did. There's also an option on the main menu for auto or manual. This allows either the computer to choose the player that's under computer control or you can select him manually by moving a pointer over him.

AA RAVE

Soccer skills, the fourth game in the pack, has eight different events for you to practice your ball and physical skills in. They're ball control, goalkeeping, penalty taking, sprint training, press-ups, weight lifting, sit-ups and bar lifts. Ball control has you weaving in and out of a set of cones, goalkeeping lets you practice penalty saving and penalty taking speaks for itself.

Sprint training is a standard waggle game where you have to run up the pitch and back again in the shortest possible time. Press-ups, weight lifting, bar lifts and sit-ups are self explanatory.

As with all Codemaster's games the graphics are slightly above average, but nothing spectacular. Sound effects fall into the same category. There's a good tune on the title menu screen for each of the games. *Matchday II* is the only game to compare it with and there are some major differences. The first is in the playing area: *Matchday II* has goals at the left and right, while this has them at the top and bottom. *Matchday II* also has a tougher computer opponent – but perhaps a bit too tough *(I agree –ed)*. There are plenty of options on the menu, but *Matchday II* has a much better selection. Unfortunately there are no trophies to play for and no league championships to fight over here, which does detract from the game a lot. You can play against other human players, of course, but *Matchday II* is a much better solo game and since they both cost the same it's all down to which of the two styles you prefer. Both games are very good, but *Matchday II* definitely has the edge, Brian. GBH

FIRST DAY TARGET:
Beat computer on medium level

The Verdict

GRAPHICS 67%
- Smooth scrolling.
- Few colours.

SONICS 58%
- Good in game effects.

GRAB FACTOR 86%
- Very good version of a football game, with all of the rules.
- Four games for the price of one full price...

STAYING POWER 77%
- Three of the games are very similar.
- Three difficulty levels.

AA RATING 81%
- A good start to the Gold range, but it would have been better rated at £5 than at £10.



▲ Foul the pavement (geddit)

SECOND OPINION

"So Code Masters have grown up and moved into the full price market: how do they do?

Well, pretty much as before, in fact. Four 'simulators' (yeah yeah) – none of which I found quite as instantly addictive as *Matchday II*. On the other hand the three football games are each respectable efforts *(Soccer Skills* I found no more interesting than *Daley Thompson* or any of the other pointless 'press up simulators').

1989 should provide some firm pointers to how the Darlings will fare in the long term: it'll certainly be interesting to watch." SC

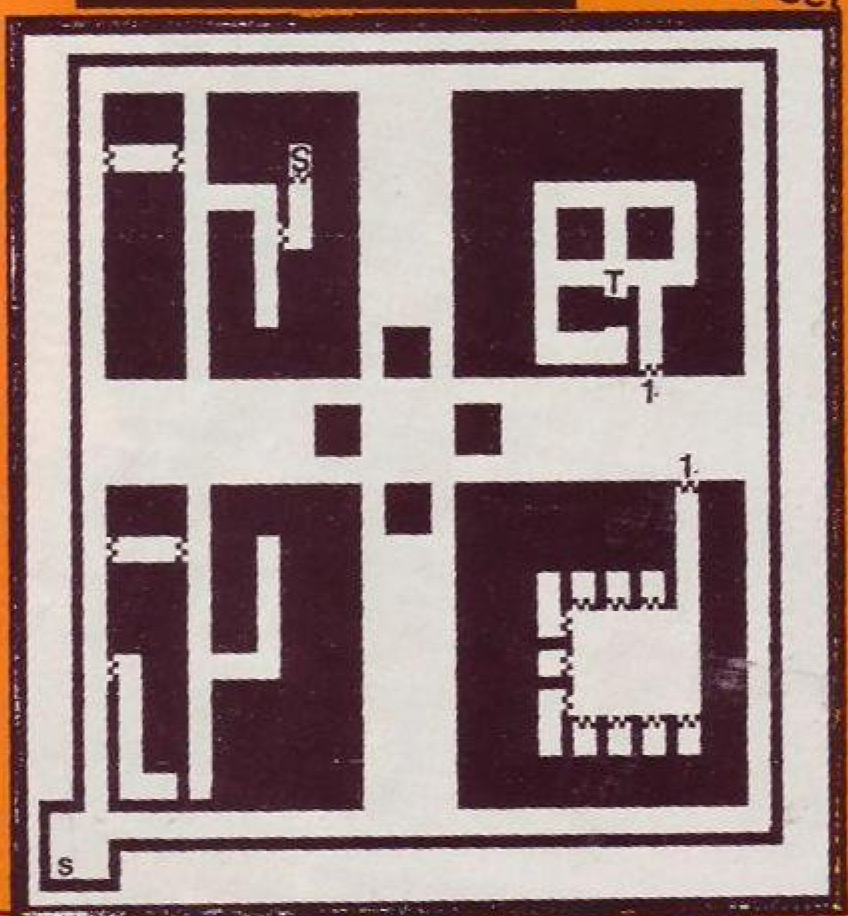
GREEN SCREEN:
Fine

CHEAT MODE

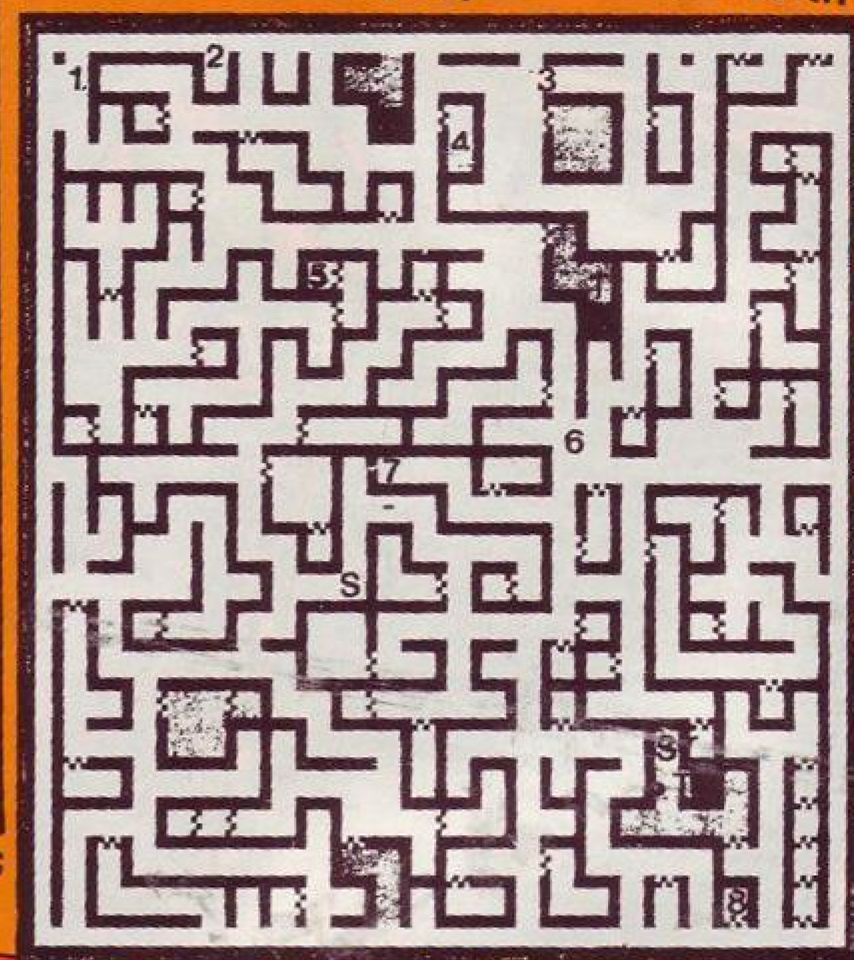
GARY BARRETT'S survival kit for CPC games

In this month's bumper six page edition we have the second part of our complete guide to Electronic Arts' *Mastergame, The Bard's Tale*, together with more pokes than it would be reasonable to expect. But we begin with a superb set of *Bard's Tale* maps...

Bard's Tale Key to Maps



WINE CELLARS



WINE CELLARS 1

1 Message
Ω Trap
S Stairs Down
s Stairs Up
P Portal Down
p Portal Up
T Teleport Sender
t Teleport Arrival
M Secret Stair to Mangar's Tower

Note: Some doors are secret and therefore will not show up in torch/lantern light

Cellars

1) Fine Wine

Sewers 1

1) Message: "Something strange is going on here..."
2) Spider God Statue (Spinner)
3) Warm water.
4) Message: "Golems are made of stone..."
5) Giant spider carved in wall.
6) Slime!
7) Message: "Pass the light at night..."
8) Message: "IRKM DESMET DAEM"

Sewers2

1) Tracks lead west here.
2) Rotting clothes and bones.
3) Something smells.
4) Message: "No exit till seven words are said..." (try levitating out of the room.)
5) Message: "Head not what is beyond understanding..."
6) Magic Mouth: "Know this, a man named Tarjan thought to many to be insane, had through wizardly powers... proclaimed himself a god in Skara Brae a hundred years ago, his image is locked in stone until made whole again..."
7) Message: "Thor is the mightiest son of Odin..."

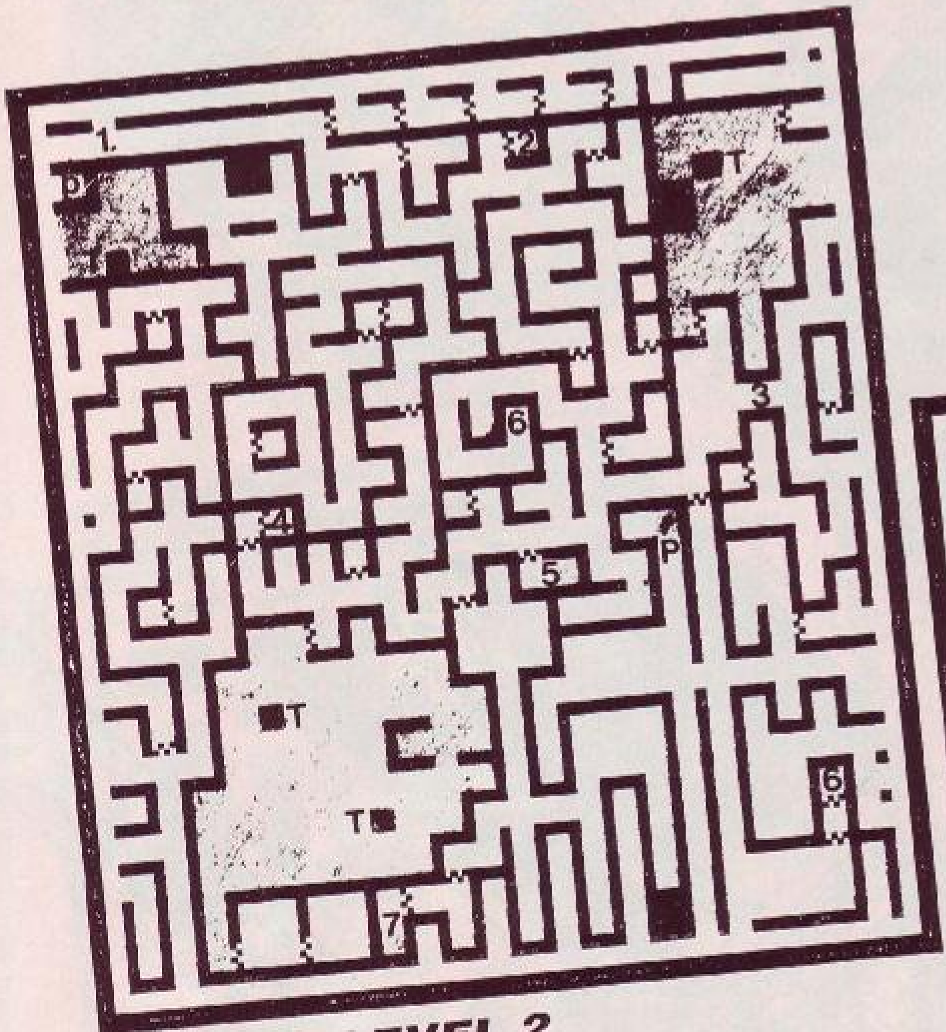
Sewers 3

1) Message: "Seek the snare from behind the scenes..."
2) Message: "The hand of time writes and cannot erase..."

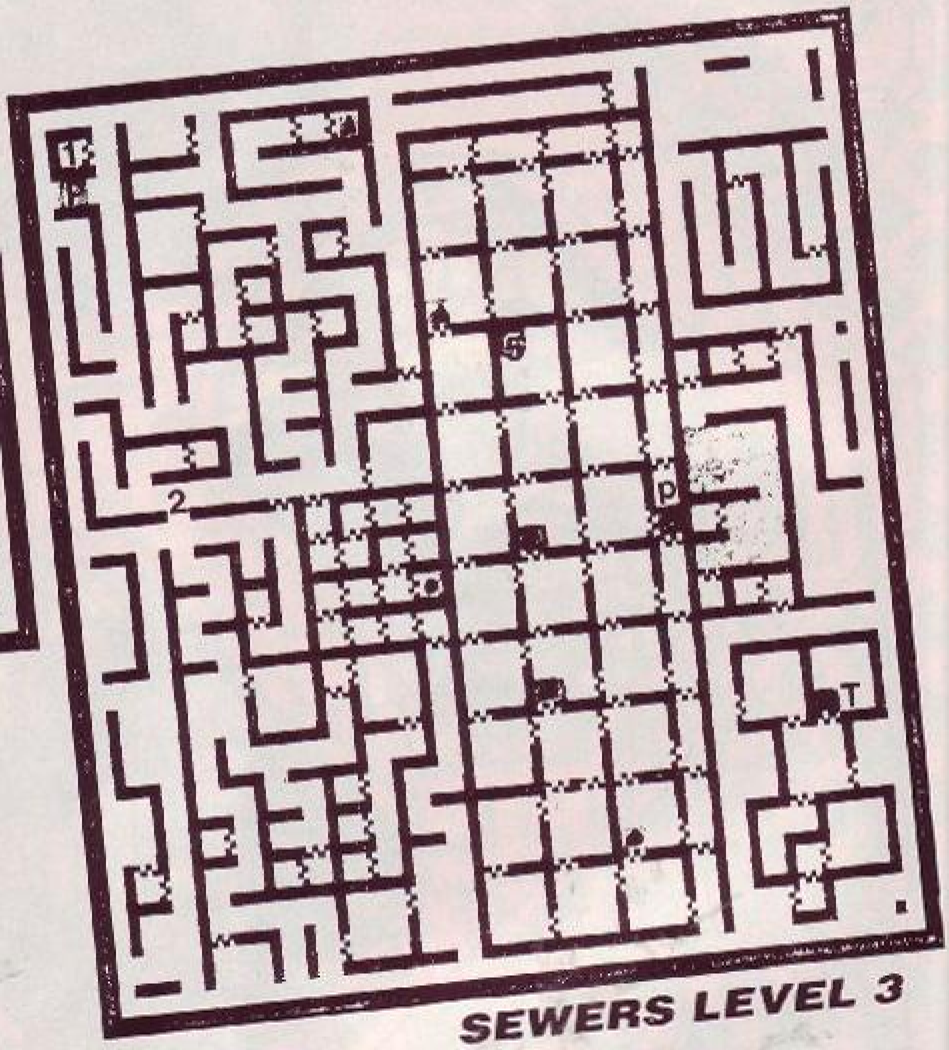


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Bard's Tale Key to Maps



SEWERS LEVEL 2



SEWERS LEVEL 3

1 Message
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S Stairs Down
s Stairs Up
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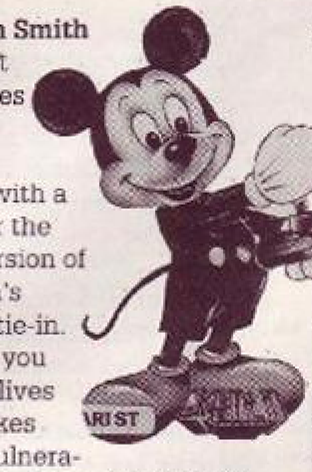
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7) Message: "Thor is the mightiest son of Odin..."

Sewers 3

1) Message: "Seek the snare from behind the scenes..."
2) Message: "The hand of time writes and cannot erase..."

Graham Smith of Street continues the rodent theme with a poke for the tape version of Gremlin's Disney tie-in. It gives you infinite lives and makes you invulnerable to ghosts and bubbles in the sub-games and also you have infinite water, slow, lightning and birds heads in the towers. To use the latter three you must first collect the relevent object. (**Method 1**.)



```
1 ' Mickey Mouse-tape
2 ' By Graham Smith
3 ' Amstrad Action
Christmas 88
10 CLS:FOR j=Ø TO
54:READ a$
2Ø POKE
j+5632,VAL("&"+a$)
3Ø NEXT j:CALL 5656
4Ø DATA 3e,c9,32,c6
5Ø DATA 52,af,32,e7
6Ø DATA 53,32,f9,64
7Ø DATA 32,69,61,32
8Ø DATA 8Ø,61,32,b8
9Ø DATA 61,c3,ØØ,32
1ØØ DATA Ø6,ØØ,11,7Ø
11Ø DATA Ø1,cd,77,bc
12Ø DATA cd,ff,bb,3e
13Ø DATA Ø9,32,98,Ø1
14Ø DATA Øe,cØ,cd,89
15Ø DATA Ø1,3e,7d,32
16Ø DATA 9d,Ø2,Øe,6b
17Ø DATA c3,a8,Ø1
```

POKE METHODS ON TAPE

Here's how to input most *Cheat Mode* tape pokes – the instructions for each poke tell you which of the two to use. 664 and 6128 owners: first type |tape.

METHOD 1

Rewind the game tape to the beginning, type in the poke listing and then type RUN and press the Enter key. (Don't use the key marked CTRL or Control, or the poke won't work.) Press the Play key on the cassette deck, then any key on the main keyboard - spacebar does nicely. The tape should now play through as normal.

METHOD 2

Skip the first bit of the game program. To do this, rewind the game tape to the beginning; type in the listing; now type CAT and press Enter. Start the tape by pressing Play and then any key. Soon you'll see the message: "Found something Block 1". It doesn't matter what the something is, and it varies from game to game. If the *Cheat Mode* instructions just tell you to skip the first block, stop the tape here.

If the instructions tell you to skip things, stop the tape when the "Found" message comes up for the last thing you're trying to skip.

Once you've stopped the tape, press Escape, type RUN and press Enter. Now press Play on the tapedeck and any key on the keyboard to start the tape.

Shorten the odds

- We receive dozens of pokes, and the ones published tend to be on cassette or disk, unless they're very short (get the hint?).
- Include an SAE if you want your disk or tape returned.
- Make sure your name and address is on everything you send us!
- Very important, this: let us know whether you'd like your *Mastergame* on tape or on disk.

JACK THE NIPPER... II

The naughty nipper gets some assistance in his jungle adventures thanks to **Graham Smith** of Street. The poke gives you infinite lives. (**Method 1**.)

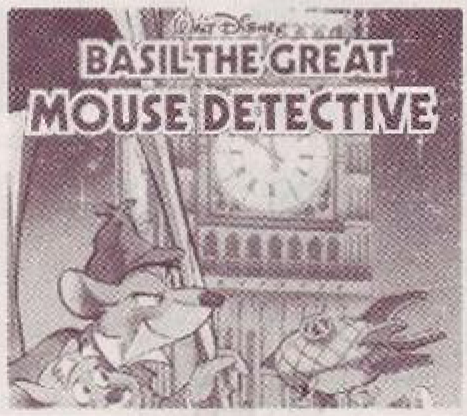
```
1 ' Jack the Nipper II
2 ' By Graham Smith
3 ' Amstrad Action
Christmas 88
1Ø CLS:FOR j=Ø TO 28:READ
a$
2Ø POKE j+224,VAL("&"+a$)
3Ø NEXT j:CALL 232
4Ø DATA af,32,5c,7Ø
5Ø data 7c,fe,Ø1,c9
6Ø DATA Ø6,ØØ,11,ØØ
7Ø data Ø1,cd,77,bc
8Ø DATA 21,c3,eØ,22
9Ø data 3a,Ø2,af,32
1ØØ DATA 3c,Ø2,cd,ff,bb
```



BASIL THE GREAT MOUSE DETECTIVE

Graham Smith. Infinite energy and time are yours in the cassette version of Gremlin's detective arcade game. (**Method 1**.)

```
1 ' Basil-tape
2 ' By Graham Smith
3 ' Amstrad Action Christmas 88
1Ø CLS:FOR j=Ø TO 43:READ a$
2Ø POKE j+96,VAL("&"+a$)
3Ø NEXT j:CALL 1Ø8
4Ø DATA 3e,c9,32,46
5Ø DATA 8e,32,dØ,9Ø
6Ø DATA af,c3,ØØ,8Ø
7Ø DATA Ø6,ØØ,11,7Ø
8Ø DATA Ø1,cd,77,bc
9Ø DATA cd,ff,bb,3e
1ØØ DATA Ø9,32,98,Ø1
11Ø DATA Øe,cØ,cd,89
12Ø DATA Ø1,21,Øb,6b
13Ø DATA 22,13,Ø2,Øe
14Ø DATA 6b,c3,a8,Ø1
```



YOGi BEAR

Graham Smith of Street appears to have joined the Society for the Protection of Animal Cartoon Characters this month. His poke for the ever hungry bear gives you infinite lives and a choice of no geysers or animals. (**Method 1**.)



```
1 ' Yogi Bear-tape
2 ' By Graham Smith
3 ' Amstrad Action
Christmas 88
1Ø CLS:FOR j=Ø
TO 31:READ
a$
2Ø POKE
j+296,VAL("&"+a$)
3Ø NEXT j:a=297:b=Ø
4Ø PRINT "Infinite
lives? ";
5Ø GOSUB 8Ø:a=3Ø2:b=2Ø1
6Ø PRINT "No geysers or
animals? ";
7Ø GOSUB 8Ø:CALL 3Ø9
8Ø a$=UPPER$(INKEY$)
9Ø IF a$="N" THEN PRINT
"N":RETURN
1ØØ IF a$<>"Y" GOTO 8Ø
11Ø PRINT "Y":POKE
a,b:RETURN
12Ø DATA 3e,Ø1,32,67
13Ø DATA 84,3e,16,32
14Ø DATA 85,75,c3,fb
15Ø DATA 98,Ø6,ØØ,11
16Ø DATA 48,Ø1,cd,77
17Ø DATA bc,3e,c3,21
18Ø DATA 28,Ø1,32,8e
19Ø DATA Ø1,22,8f,Ø1
```



SWORD SLAYER

You'll probably be surprised to find that this poke for Player's hack-em-up is by none other than **Graham Smith**. With it you'll get infinite health which will make life considerably easier. (**Method 1**.)

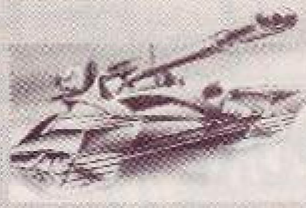
```
1 ' Sword Slayer-tape
2 ' By Graham Smith
3 ' Amstrad Action Christmas 88
1Ø FOR j=Ø TO 13:READ a$
2Ø POKE j+&BE3Ø,VAL("&"+a$)
3Ø NEXT j:MODE 1
4Ø MEMORY &3FFF:LOAD"
5Ø POKE 16767,143
6Ø POKE 16844,179
7Ø POKE 18Ø25,129
8Ø POKE 18Ø26,45
9Ø POKE 18Ø27,168
1ØØ CALL 16389
11Ø DATA 3e,3c,32,a8
12Ø DATA 14,32,b6
13Ø DATA 14,21,ØØ,cØ
14Ø DATA c3,f4,ac
```



Arctic Fox

Another poke from **Tony Jones**: this time Electronic Arts' *Rave* game gets the treatment. Infinite shields are at your disposal. Run the program with the *Arctic Fox* disk in the drive.

```
1 'Arcticfox-Disk
2 ' by Tony Jones
3 'Amstrad Action
Christmas 88
1Ø MODE Ø:BORDER Ø
2Ø FOR i=Ø TO 15:INK
i,Ø:NEXT
3Ø LOAD"openi",&CØØØ
4Ø INK 1,6:INK 2,11
5Ø INK 3,5:INK 4,26
6Ø MEMORY &176F
7Ø LOAD"main",&177Ø
8Ø POKE &A3ØØ,Ø:CALL
&177Ø
```



Mazie



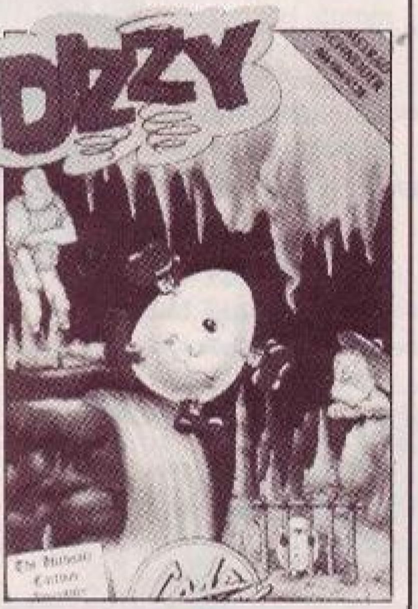
D+D Hackers third contribution this month is for Zeppelin's bat and ball game. (**Method 1**.)

```
1 ' Mazie-tape
2 ' by D+D Hacking
3 'Amstrad Action Christmas 88
1Ø MODE Ø:BORDER Ø
2Ø FOR x=Ø TO 15:READ d
3Ø INK x,d:NEXT
4Ø LOAD "!HEADING.SCR"
5Ø MEMORY 1Ø743
6Ø LOAD "!pics.bin",1Ø744
7Ø LOAD "!screens.bin",&37A8
8Ø LOAD "!pics2.BIN",&A178
9Ø LOAD "!mazie.bin",&738Ø
1ØØ FOR z=11175 TO 11211
11Ø READ a$:a=VAL("&"+a$)
12Ø POKE z,a:NEXT
13Ø POKE &88ØØ,Ø:CALL &738Ø
14Ø DATA Ø,3,26,6,2Ø,13,16
15Ø DATA 15,24,18,2,14,4,8
16Ø DATA 17,7,44,2b,44,2Ø
17Ø DATA 48,41,56,45,2Ø,44
18Ø DATA 4f,4e,45,2Ø,49
19Ø DATA 54,2Ø,2Ø,41,47
2ØØ DATA 41,49,4e,2e,2e
21Ø DATA 2e,2e,48,4f,2Ø
22Ø DATA 48,4f,2Ø,48,4f
23Ø DATA 2Ø,2Ø,2Ø,2Ø,2Ø
24Ø DATA 2Ø,2Ø,2Ø,2Ø,2Ø,2Ø
```

Dizzy

Issue 37's cover tape gets hacked by **Matt Cawley** to do just about anything. If you don't want some of the features then simply delete the DATA statement following the appropriate REM. (**Method 1**.)

```
1 ' Dizzy-tape
2 ' by Matt Cawley
3 ' Amstrad Action Christmas
  88
1Ø MEMORY &3ØØØ:addr=&bfØØ
2Ø READ byte$
3Ø IF byte$="CM" THEN 7Ø
4Ø byte=VAL("&"+byte$)
5Ø POKE addr,byte
6Ø addr=addr+1:GOTO 2Ø
7Ø LOAD"":CALL &3abØ
8Ø LOAD"!",&3Ø4Ø
9Ø CALL &BFØØ
1ØØ ' The Key
11Ø DATA Ø1,c8,Ø1,11,37,bd
12Ø DATA 21,2d,bf,ed,bØ,Ø1
13Ø DATA ee,Ø1,21,4Ø,3Ø,11
14Ø DATA 4Ø,ØØ,ed,bØ,21,4Ø
15Ø DATA ØØ,e5,21,ØØ,bb,e5
16Ø DATA 21,ee,Ø1,e5,21,Ø7
17Ø DATA b8,e5,21,bb,Ø2,e5
18Ø DATA f1,f3,c9,af
19Ø ' the pokes
195 REM Infinite Lives
2ØØ DATA 32,c2,9b
2Ø5 REM Fast Game
21Ø DATA 32,b3,8f
215 REM Fast Music
22Ø DATA 32,8d,9c,32,9f,9c
225 REM Slow Music
23Ø DATA 32,ad,9c
235 No Nasties
24Ø DATA 3e,c9,32,72,8Ø
245 REM Game Completed
25Ø DATA 3e,c9,32,97,8Ø
26Ø REM Leave
27Ø DATA 3e,cf,32,37,bd,3e
28Ø DATA 88,32,38,bd,32,39
29Ø DATA bd,c3,37,bd,CM
```



Cybernoid II

Nicholas Dodd of Woodthorpe has found Raff Cecco's built in cheat.: go to the redefine keys option and type in O, R, G and Y as the controls. Go back again and choose some more appropriate keys and you can then play it with infinite lives.



VINDICATOR

Kojo Elliman of London has sent in the passwords to allow access to level two and three of Imagine's game of alien slaying.

Level Two:
Oppenheimer

Level Three:
Enolagay

2Ø88

D+D Hacking has done the dirty on *2Ø88* to give you a choice of how many lives you have and invulnerabilty to snakes. (**Method 1**.)

```
1 ' 2Ø88-tape
2 ' by D+D Hacking
3 'Amstrad Action Christmas 88
1Ø INK Ø,Ø:INK 1,16
2Ø PEN 1:BORDER Ø:CLS
3Ø MEMORY &11FF
4Ø LOAD"code.bin"
5Ø INPUT"no of lives";a
6Ø POKE 4961,a
7Ø INPUT"invincibility against snake (y/n)";a$
8Ø IF a$="y" THEN 9Ø ELSE 1ØØ
9Ø POKE &348D,255
1ØØ MODE Ø
11Ø CALL &12ØØ
```

Nebulus

Tony Jones of Bristol has hacked into the disk version of Hewson's *Mastergame* to give you infinite lives. Type in the program and run it with the *Nebulus* disk in the drive.

```
1 ' Nebulus-Disk
2 ' by Tony Jones
3 ' Amstrad Action Christmas 88
1Ø MEMORY &8ØFF:LOAD"nebload",&81ØØ
2Ø POKE &8165,&5Ø:POKE &8166,Ø
3Ø FOR n=&5Ø TO &64:READ a$
4Ø POKE n,VAL("&"+a$):NEXT
5Ø MODE Ø:CALL &81ØØ
6Ø DATA af,32,ef,c5,32,f6,c5
7Ø DATA 32,f7,c5,32,f8,c5,c3
8Ø DATA ØØ,cØ,ØØ,ØØ,ØØ,ØØ,ØØ
```

And **Sam Walker** of Minchinhampton has sent in some tips to get to the later stages of Hewson's *Mastergame*. Simply press the combination of keys during play to get you to the appropriate level first press Return and CLR and then:

Level	Keys
Slippery Slide	E,D
Swimmers Delight	R,F
Edge of Doom	U,J

Tanium

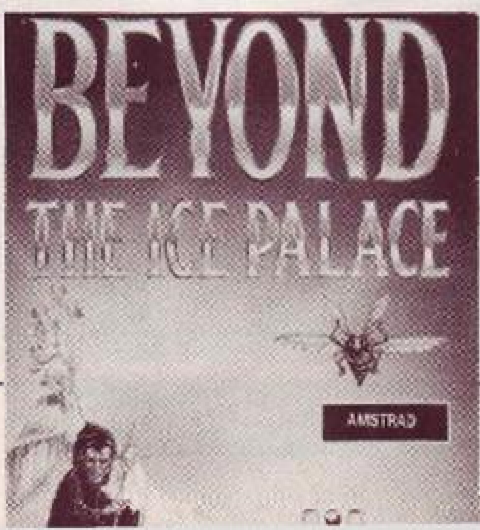
Anyone suffering from severe life loss in *Tanium* has nothing to fear anymore due to the efforts of **Graham Smith** of Street. The poke gives you infinite lives. (**Method 1**.)

```
1 ' Tanium-tape
2 ' By Graham Smith
3 ' Amstrad Action
  Christmas 88
1Ø MODE 1:MEMORY &3FFF:LOAD"
2Ø POKE 16767,143
3Ø POKE 16844,179
4Ø POKE 18Ø16,2Ø
5Ø POKE 18Ø17,252
6Ø POKE 18Ø18,99
7Ø POKE 18Ø19,132
8Ø CALL 16389
```

Beyond the Ice Palace

Wally and **Baker** from the Belgium Hackers Federation have sent in this poke for the tape version of Elite's chop-em-up arcade game. It gives you infinite lives and spirits and invulnerability. (**Method 1**).

```
1 ' Beyond the Ice Palace-tape
2 ' by Wally
3 ' Amstrad Action Christmas 88
1Ø MODE 1:FOR n=&82ØØ TO &821B
2Ø READ a$
3Ø POKE n,VAL("&"+a$)
4Ø NEXT
5Ø POKE &82Ø1,&A7
6Ø POKE &82Ø6,&C9
7Ø POKE &82ØB,Ø
8Ø POKE &821Ø,&C9
9Ø POKE &8215,Ø
1ØØ PRINT"Insert tape"
11Ø FOR n=1 TO 1ØØØ:NEXT
12Ø MEMORY &7FFF
13Ø MODE 1
14Ø LOAD "!",&8ØØØ
15Ø POKE &8Ø76,Ø
16Ø POKE &8Ø77,&82
17Ø CALL &8ØØØ
18Ø DATA 3e,3d,32,38,Ød,3e
19Ø DATA 21,32,34,ff,3e,3d
2ØØ DATA 32,75,e7,3e,3a,32
21Ø DATA d3,Øe,3e,c8,32,29
22Ø DATA cf,c3,ØØ,Ø1
```



Black box

➤ Most games are heavily protected these days, resulting in longer pokes.

➤ Many of you have one of the infamous black boxes that can be used to stop programs – the Multiface 2 from Romantic Robot for example.

➤ Often the only thing that they're used for is transferring games from tape to disk, but they can also be used to hack games for infinite lives etc.

➤ This occasional section is for owners of the Multiface 2 and similar devices so that they can poke games without typing in huge listings.

➤ Here's how you enter them:

➤ Plug the Multiface into the expansion slot at the back of your keyboard. (Multiface 2 owners: make sure that the switch on the front is in the up position.)

➤ Load the game that you want to poke in the usual manner following the instructions supplied with it. (Multiface 2 owners: move the switch to the down position after it has loaded.)

➤ Press the red button on the Multiface and a menu appears at the bottom of the screen. Press 'T' for tool and then 'H' to change input to hexadecimal.

➤ Press the spacebar and type in the number under the Addr column. Next type in the number under the Poke column.

➤ Repeat this process until you've entered all of the pokes that are listed for the game and then press 'ESC'.

➤ Press 'R' to return to the game. It then runs with the pokes that you've just entered.

Game	Addr	Poke	Effect
Rasputin	ØeØc	c9	infinite life force
	Øe18	c9	infinite sword strength
	Øe1b	c9	infinite shield strength
Nightshade	7ed3	ØØ	infinite lives
Jack Nipper II	7Ø5c	ØØ	infinite lives
Head Over Heels	26c3	ØØ	infinite lives
Basil, Mouse Dick	8e46	c9	infinite energy
	9ØdØ	c9	infinite time
Mickey Mouse	52c6	c9	invulnerability in sub-games
	53e7	ØØ	infinite lives in sub-games
	64f9	ØØ	infinite water
	6169	ØØ	infinite slow
	618Ø	ØØ	infinite lightning
	61a1	ØØ	infinite shield
	61b8	ØØ	infinite bird
	61c5	ØØ	infinite glue
	5157	ØØ	infinite lives against Ogre King (only enter this poke when you get to tower five)

ROMANTIC ROBOT *present*

1988 – THE YEAR OF THE ROBOT

RESET ● multiface two ● STOP

If you wish to be able to STOP any program at any time and COPY it to disk or tape, fully automatically, at a touch of a button, then MULTIFACE 2+ is the ONLY answer. There are no other comparable hardware devices, and the software copiers simply cannot compete.

Firstly you cannot compare the SUCCESS ratio of any tape copier with the MULTIFACE – you get what you pay for (and we throw in a lot more with the MULTIFACE . . .).

TAPE COPIERS always need to be loaded first, whilst MULTIFACE has all software in ROM for instant use. TAPE COPIERS can only attempt to copy a program as it stands, before it loads – there are various protections in the way and not enough memory for both the program to be copied and the copier. MULTIFACE is different: you can load any program from TAPE or DISK, run it as you wish and activate the MULTIFACE whenever you need it. Once you SAVE a program, be it to DISK or TAPE, you can CONTINUE it, SAVE it again if you wish, etc. In fact, you can play games as never before: there is no need to start from the beginning each time you play a game (as you would with a tape copier – if it could copy in the first place . . .). Since you can SAVE a program at ANY TIME and continue it, you can actually SAVE as you progress through a game. If, eventually, you loose all your lives, you can just load the latest saved version and continue from there! That is, if you do not manage to get INFINITE LIVES to start with: MULTIFACE has a built-in TOOLKIT which allows you to STUDY and ALTER anything in any program; you can thus POKE in infinite lives, ammo, etc.

MULTIFACE is extremely simple to use, friendly, idiot-proof, menu-driven with on-screen instructions, fully automatic – PURE MAGIC. It can be used on any CPC, comes with a cable and an extension bus for £47.95 ONLY! By the time you buy 10 programs on tape instead of disk – MULTIFACE will put them on disk for you – you will have saved some £50 which is more than the cost of a MULTIFACE. The money you save on further tapes is all yours!

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AMSTRAD ACTION JANUARY 1987

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THE BARD'S TALE

Part two Gary Barrett finds himself in the cellars...

All for a bottle of wine

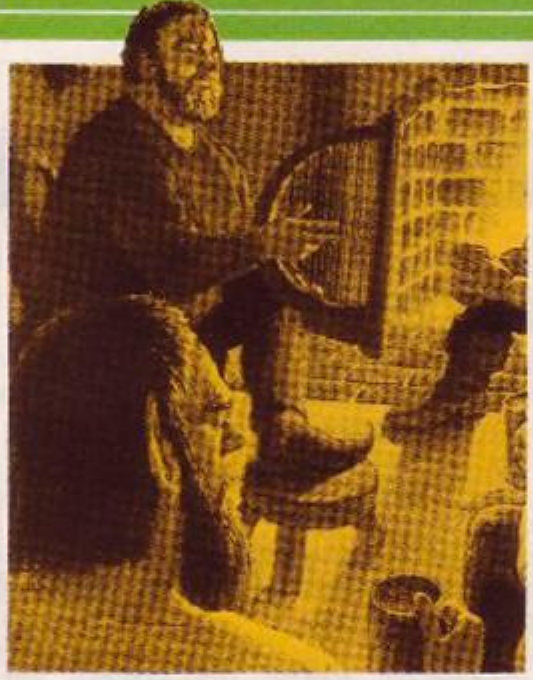
Last month we began our guided tour of the picturesque city of Skara Brae by helping you take those first few steps out of the **Adventurers' Guild** and onto the bustling streets filled with monsters (a bit like Bath only our monsters are the tourists, motto: 'If it doesn't move, photograph it; if it does, get in its way'). After gaining a few levels and learning your way to the important buildings we dealt with a Samurai statue and went into a tavern for a quiet drink, only to find that we had to fetch our own bottle of wine from the cellar. Can't get the staff you know.

A word of warning before you continue: once inside the cellars your magic points will not regenerate, so it's advisable to wait outside until they're charged up fully. It's also worth casting some long duration spells before you enter.

The dark side

Once you've taken those first tentative steps into the cellars you'll come to a startling conclusion: 'Dark in here innit?'. If you have a torch or lantern then you can use that, otherwise it time to use one of the light giving spells like **Mage Flame,** Sabhar's **Steelight** or if you have a fifth level Conjuror use **Lesser Revelation,** because it'll show up any secret doors.

Another useful precaution to take is Kiel's **Magic Compass** which helps considerably in finding your bearings. If you



cast **Scry Sight** you'll find that you're on level 0, 0 squares north and 0 squares east of the entry stairs. If your party is badly beaten up later on then head back to these co-ordinates and make for the 'safety' of Skara Brae. The cellars aren't really that difficult to escape from, all you need to do is find either the north, south, east or west walls and then follow them round until you get to the **south western corner** of the cellars which is where the stairs are.

Inside the cellars you'll encounter more than one group of foes to fight. Only the front two rows of foes can fight you, but any rows behind them can still cast spells at you. If you come across three or four groups then you're better off running for it, but if there are only two then you can use your front row of hack and slayers to take on one group and spell casters (or the **Bard** with his **Fire Horn**) to deal with the other. **Warstrike** and **Starflare** are good spells to use if you have a high enough level (fifth) conjuror or magician respectively.

Delve deeper...

If you defeat the enemies then you'll either get the usual treasure and experience or find a chest. Chests are often trapped and these must first be dealt with. Rogues are an unreliable way of dealing with traps: it's much better to use the conjuror spell **Trap Zap** instead. You don't have to open the chest – you'll still get the experience but none of the treasure – and down in the cellars you may come across some magic items.

After you've explored the Cellars fully and been for several visits you might feel ready to delve deeper and head for the sewers. The stairs down are located at **18 squares north, 7 squares east** and if you take them things begin to get much more dangerous.



The Bard's Tale is not published by US Gold (as we said last month). In fact, as you well know, it's by Electronic Arts, at £8.95 (cassette) and £14.95 (disk).

Next month we continue our underground tour of Skara Brae, entering the labyrinthine sewer system and meeting some of the interesting inhabitants. Nose plugs are recommended.

Cheat Mode winners and would-be winners take note!

We've decided to change our prize awarding system for *Cheat Mode*. The reason is that some games have proved difficult to track down – September's *Mastergame*, for example, US Gold's *Heroes of the Lance*, has been slow to appear, and it's not the only one. This has resulted in a backlog of winners who have been waiting for a while to receive their rewards. And that's hardly fair, so we're simplifying things somewhat: each month, six contributors receive the month's *Mastergame*.

When there's a problem they'll be sent a list of alternatives to choose from.

To win a copy of the current *Mastergame*, all you have to do is produce an excellent map, poke or playing tips. Please specify whether you want your game on tape or on disk.

This month's *Mastergame* winners are Graham Smith for his multiple pokes; Tony Jones, Sam Walker, D+D Hacking, Matt Cawley and Wally and Baker.

Give your CPC a Christmas Present Courtesy of AA!

Mapping

Richard Coton of Walsall is a wargamer. Rather than go to the trouble of drawing free-hand the scene of his battles, though, he uses this program. It allows you to edit a map, and print out the result on any Epson compatible printer.

The screen is split in two – you edit the map in one half, and messages are presented to you in the other. A menu of options is displayed when the program runs. These are Save, Load, Graphics, Typing and Print. The first two are fairly obvious, saving and loading various battlefields. Graphics let you place a particular graphics block anywhere on the map.

These graphics blocks have been set up to display fantasy locations, but by suitable tinkering with the DATA statements, others can be placed on the screen as graphics.

Full instructions are included, and the program is public domain.

```
1Ø ' Fantasy map designer - PUBLIC DOMAIN
2Ø ' By Richard Coton
3Ø ' Amstrad Action Christmas 88
4Ø ' Look at DMP 2ØØØ or DMP 216Ø printer
5Ø ' manual for printing any maps
7Ø GOSUB 63Ø
8Ø SYMBOL AFTER 32
9Ø PEN #1,1:PAPER #1,Ø:MODE 1:DIM map(39,18):GOSUB
   77Ø
1ØØ MODE 1
11Ø GOSUB 1Ø9Ø
12Ø ' SCREEN LAYOUT
13Ø WINDOW 1,4Ø,2Ø,25:WINDOW #1,1,4Ø,1,18
14Ø ' MAIN PROGRAM
15Ø xp=2Ø:yp=1Ø
16Ø CLS #1:CLS
```

Program notes

IMPORTANT: The program as it stands will *not* print out anything yet. You must find a printer dump routine that works with your computer – there's one in *Hot Tips* for Epson compatibles. The megadump in *AA22* can be used to produce a huge map area to actually fight the battles on.

How to do it: simply type in your dump program. Instead of the END statement, type RETURN (the word itself, not the return key). If the program does not have an END statement, then type in a RETURN as the last line of a program. So if your program ended at 2ØØ, then line 21Ø would be:-

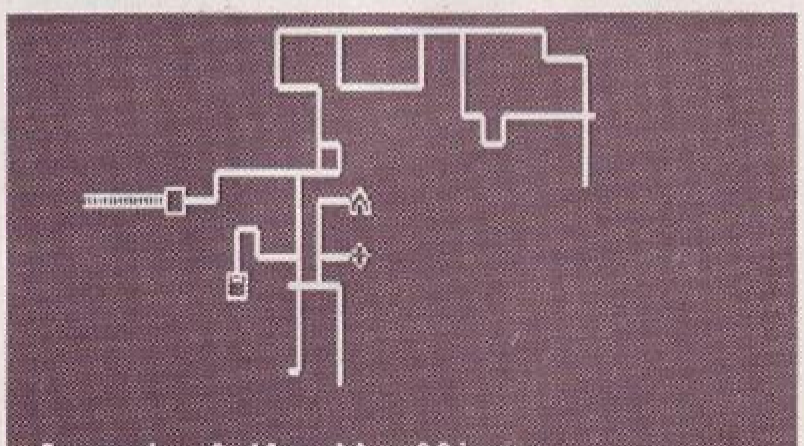
21Ø RETURN

Once you have a suitable printer dump program, then type RENUM 11ØØ,1Ø,1Ø. SAVE it, load in the map designer, and MERGE the printer dump program. Now save the combined, finished program.

If you want to alter the graphic designs, the data statements to look at are held from 78Ø to 1Ø7Ø. *The Look* next month will offer a few tips on how to do it.

```
17Ø WHILE INKEY$<>"":WEND:PRINT"[Sve [Lad
    [G]raphics [T]yping [Wpe [Print]":PRINT:
    PRINT"Make your choice";
18Ø i$=UPPER$(INKEY$):IF i$="" THEN 18Ø
19Ø IF i$="S" THEN 25Ø
2ØØ IF i$="L" THEN 29Ø
21Ø IF i$="G" THEN 35Ø
22Ø IF i$="T" THEN 42Ø
23Ø IF i$="W" THEN 49Ø
235 IF i$="P" THEN GOSUB 11ØØ
24Ø GOTO 18Ø
25Ø ' [Sve map
26Ø n$="":CLS:PRINT"Enter filename":PRINT:INPUT n$
27Ø OPENOUT n$+".MAP":FOR x=1 TO 39:FOR y=1 TO 18:
    WRITE #9,map(x,y):NEXT:NEXT:CLOSEOUT
28Ø CLS:GOTO 17Ø
29Ø ' [Lad map
3ØØ CLS:PRINT"Enter filename":PRINT:INPUT n$
31Ø OPENIN n$+".MAP":FOR x=1 TO 39:FOR y=1 TO 18:
    INPUT #9,map(x,y):NEXT:NEXT
32Ø CLOSEIN
33Ø FOR x=1 TO 39:FOR y=1 TO 18:LOCATE #1,x,y:
    PRINT #1,CHR$(map(x,y)):NEXT:NEXT
34Ø CLS:GOTO 17Ø
35Ø ' [G]raphics position
36Ø CLS:PRINT"Use CURSOR keys then press SPACE":
    GOSUB 56Ø
37Ø CLS:FOR i=1 TO 45:a$=STR$(i)+CHR$(i+144):PRINT
    a$;:NEXT
38Ø WHILE INKEY$<>"":WEND:INPUT g
39Ø IF g=128 THEN LOCATE #1,xp,yp:PRINT #1," ":map
    (xp,yp)=128:CLS:GOTO 17Ø
4ØØ IF g<1 OR g>45 THEN CLS:GOTO 17Ø
41Ø LOCATE #1,xp,yp:PRINT #1,CHR$(g+144):map(xp,
    yp)=g+144:CLS:GOTO 17Ø
42Ø ' [T]yping position
43Ø CLS:PRINT"Use CURSOR keys then press SPACE":
    GOSUB 56Ø
44Ø CLS:PRINT"Enter one word of text only":PRINT:
    INPUT text$:PRINT:PRINT"Please wait":xp1=39-xp
```

```
45Ø IF LEN(text$)>xp1 THEN PRINT"Too long":FOR i=1
    TO 2ØØØ:NEXT:CLS:GOTO 17Ø
46Ø xp1=xp:a=33:FOR i=1 TO LEN(text$)
47Ø IF MID$(text$,i,1)=CHR$(a) THEN map(xp1,yp)=a:
    a=33:xp1=xp1+1:NEXT ELSE a=a+1:GOTO 47Ø
48Ø xp1=xp:FOR i=xp1 TO xp1+LEN(text$):LOCATE #1,i,
    yp:PRINT #1,CHR$(map(i,yp)):NEXT:CLS:GOTO 17Ø
49Ø ' [Wpe
5ØØ CLS:PRINT"Are you sure (Y/N) ?"
51Ø i$=UPPER$(INKEY$):IF i$="" THEN 51Ø
52Ø IF i$="Y" THEN CLS #1:GOSUB 1Ø9Ø:CLS:GOTO 17Ø
53Ø IF i$="N" THEN CLS:GOTO 17Ø
54Ø GOTO 51Ø
55Ø ' Cursor movement
56Ø LOCATE #1,xp,yp:PEN #1,Ø:PAPER #1,1:PRINT #1,
    CHR$(map(xp,yp))
57Ø IF INKEY(Ø)=Ø AND yp>1 THEN LOCATE #1,xp,yp:
    PEN #1,1:PAPER #1,Ø:PRINT #1,CHR$(map(xp,yp)):
    yp=yp-1:GOTO 56Ø
58Ø IF INKEY(2)=Ø AND yp<18 THEN LOCATE #1,xp,yp:
    PEN #1,1:PAPER #1,Ø:PRINT #1,CHR$(map(xp,yp)):
    yp=yp+1:GOTO 56Ø
59Ø IF INKEY(8)=Ø AND xp>1 THEN LOCATE #1,xp,yp:
    PEN #1,1:PAPER #1,Ø:PRINT #1,CHR$(map(xp,yp)):
    xp=xp-1:GOTO 56Ø
6ØØ IF INKEY(1)=Ø AND xp<39 THEN LOCATE #1,xp,yp:
    PEN #1,1:PAPER #1,Ø:PRINT #1,CHR$(map(xp,yp)):
    xp=xp+1:GOTO 56Ø
61Ø IF INKEY(47)=Ø THEN PEN #1,1:PAPER #1,Ø:LOCATE
    #1,xp,yp:PEN #1,1:PAPER #1,Ø:PRINT #1,CHR$(map
    (xp,yp)):WHILE INKEY$<>"":WEND:RETURN
62Ø GOTO 56Ø
63Ø ' OPENING SCREEN
64Ø PEN 3:MODE 1:LOCATE 1Ø,1:PRINT"FANTASY MAP
    DESIGNER":LOCATE 1Ø,2:PRINT STRING$(2Ø,2Ø8):
    PEN 1
65Ø PRINT:PRINT" The screen is split into two
    areas, themap window and the option window.
    You make your choice of action and follow
    any instructions."
66Ø PEN 3:PRINT:PRINT"SAVE":PEN 1:PRINT:PRINT"
    This option allows you to save the map which
    is currently on screen."
67Ø PEN 3:PRINT:PRINT"LOAD":PEN 1:PRINT:PRINT"
    This option allows you to load a map
    previously saved on tape.":PEN 2:LOCATE 15,24:
    PRINT"PRESS SPACE":CALL &BB18:PEN 3:CLS
68Ø PRINT"GRAPHICS":PEN 1:PRINT:PRINT" This option
    allows you to move a cursoraround the screen
    to the desired place. You press space and you
    are given a     selection of graphics to choose
    from."
69Ø PRINT" Enter the number which is next to the
    graphic you want."
7ØØ PRINT:PRINT" The first 15 graphics are used for
    routes available to the adventurer. The next 7
    are used as rooms, then there is a tree, a
    pit, a hut, 2 lots of steps."
71Ø PRINT" The next ones are 2 graphics used for
    rivers, bridges, marsh or swamp,
    mountains, hills, an arch, a portculis, 4
    graphics used for rivers and 4 graphics used
    for dead ends."
72Ø PRINT" If you type the number 128 then a
    spaceis placed at the current cursor
    position.":PEN 2:LOCATE 15,24:PRINT"PRESS
    SPACE":CALL &BB18:PEN 3:CLS
73Ø PRINT"TYPING":PEN 1:PRINT:PRINT" This option
    allows you to place the    cursor anywhere on
    the screen and then  asks you to type in one
    word only. It    then puts the word on the map.
    ":PEN 3:PRINT:PRINT
74Ø PRINT"WIPE":PEN 1:PRINT:PRINT" This option
    allows you to clear the    whole map from
    memory and the screen.":PEN 3:PRINT:PRINT
75Ø PRINT"PRINT":PEN 1:PRINT:PRINT" This option
    allows you to dump the map currently on screen
    , to a printer. This is done by pressing CTRL
    and COPY at thesame time.    [[[THIS SHOULD
    ONLY BE DONEWHEN THE OPTION WINDOW IS CLEAR]
    ]]":PEN 2
76Ø LOCATE 15,24:PRINT"PRESS SPACE":CALL &BB18:
    PEN 1:RETURN
77Ø ' GRAPHICS SET UP
78Ø SYMBOL 16Ø,255,129,129,129,129,129,129,255
79Ø SYMBOL 161,255,165,189,129,129,189,165,255
8ØØ SYMBOL 162,255,129,231,165,165,231,129,255
81Ø SYMBOL 163,255,165,189,129,129,129,129,255
82Ø SYMBOL 164,255,129,135,133,133,135,129,255
83Ø SYMBOL 165,255,129,129,129,129,189,165,255
84Ø SYMBOL 166,255,129,225,161,161,225,129,255
85Ø SYMBOL 167,24,6Ø,24,126,24,255,24,24
86Ø SYMBOL 168,24,36,1Ø2,129,1Ø2,36,24,Ø
87Ø SYMBOL 169,24,6Ø,1Ø2,66,153,165,165,231
88Ø SYMBOL 17Ø,36,6Ø,36,6Ø,36,6Ø,36,6Ø
89Ø SYMBOL 171,Ø,Ø,255,85,85,255,Ø,Ø
9ØØ SYMBOL 172,Ø,Ø,231,24,Ø,195,6Ø,Ø
91Ø SYMBOL 173,36,36,34,18,18,34,36,36
92Ø SYMBOL 174,Ø,24,6Ø,6Ø,6Ø,52,6Ø,6Ø
93Ø SYMBOL 175,66,36,36,36,36,36,36,66
94Ø SYMBOL 176,Ø,129,126,Ø,Ø,126,129,Ø
95Ø SYMBOL 177,Ø,Ø,Ø,Ø,165,165,9Ø,6Ø
96Ø SYMBOL 178,Ø,Ø,8,2Ø,2Ø,34,99,129
97Ø SYMBOL 179,Ø,Ø,Ø,Ø,Ø,24,1Ø2,195
98Ø SYMBOL 18Ø,56,1Ø8,254,17Ø,254,17Ø,254,17Ø
99Ø SYMBOL 181,36,1ØØ,196,8,16,224,Ø,Ø
1ØØØ SYMBOL 182,Ø,Ø,224,16,8,196,1ØØ,36
1Ø1Ø SYMBOL 183,Ø,Ø,7,8,16,35,38,36
1Ø2Ø SYMBOL 184,36,38,35,16,8,7,Ø,Ø
1Ø3Ø SYMBOL 185,6Ø,66,129,129,129,129,129,129
1Ø4Ø SYMBOL 186,Ø,Ø,32,224,224,32,Ø,Ø
1Ø5Ø SYMBOL 187,Ø,Ø,Ø,Ø,Ø,6Ø,24,24
1Ø6Ø SYMBOL 188,Ø,Ø,4,7,7,4,Ø,Ø
1Ø7Ø SYMBOL 189,24,24,6Ø,Ø,Ø,Ø,Ø,Ø
1Ø8Ø RETURN
1Ø9Ø FOR x=1 TO 39:FOR y=1 TO 18:map(x,y)=128:NEXT
    :NEXT:RETURN ●
```



● Mapping – the results you *should* get!

Isotopes

Remember Jeremy Fox-Geen's simple, short line drawing game Trapper (*AA*38)? Now he's gone one better and produced a longer and furiously addictive game for you to savour.

The theme of the game is that you control a robot, which must, for the common good, 'eat' radioactive spillages and render them harmless. Avoid the rocks, which cause you to crash. The main problems are, however, first that when you dispose of some debris you grow bigger (eating yourself is bad news); and second that the edges of the screen are outside your territory, and you explode if you hit them.

What raises the game, though, is the multicoloured mode 1 graphics, the controllability of the snake, and the (variable) speed of the game. It's public domain too!

```
1 REM Isotopes - PUBLIC DOMAIN
2 REM By J.Fox-Geen
3 REM Amstrad Action Christmas 1988
1Ø RANDOMIZE TIME
2Ø FOR a=5 TO 11:POKE &A4ØØ+a,INT((RND*1ØØ)*2):
   NEXT
3Ø GOSUB 45Ø
4Ø REM Title Screen
5Ø PEN 3:PAPER 2
6Ø LOCATE 13,7:PRINT "---------------"
7Ø LOCATE 13,8
8Ø PRINT "I S O T O P E S"
9Ø LOCATE 13,9:PRINT "---------------"
1ØØ LOCATE 28,11:PEN 3:PAPER 1
11Ø PRINT "By J.Fox-Geen"
12Ø WINDOW #1,1Ø,31,16,22
13Ø PAPER #1,1:CLS #1:PEN #1,2
14Ø WINDOW SWAP Ø,1
15Ø LOCATE 1,2:PRINT "1....Play Isotopes"
16Ø LOCATE 1,4:PRINT "2....Instructions"
17Ø LOCATE 1,6:PRINT "3....Change Speed"
18Ø IF INKEY(64)=Ø THEN GOTO 22Ø
19Ø IF INKEY(65)=Ø THEN GOTO 87Ø
2ØØ IF INKEY(57)=Ø THEN CLS:INPUT "New Speed
    (Ø-5ØØ):",sp%:IF sp%<Ø OR sp%>5ØØ THEN GOTO
    4Ø ELSE GOTO 22Ø
21Ø GOTO 18Ø
22Ø MODE 1
23Ø sc%=Ø:d%=1:se%=3
24Ø x%=16:y%=17:POKE nxc%,x%:POKE nyc%,y%
25Ø POKE dir%,d%:POKE seg%,se%:CALL &92C2
26Ø GOSUB 64Ø
27Ø REM Main Loop
28Ø SOUND 2+128,3ØØ,5,1Ø,Ø,Ø,3Ø
29Ø i%=PEEK(chk%)
3ØØ IF i%=1 THEN GOTO 76Ø
31Ø IF i%=2 THEN sc%=sc%+1Ø:se%=se%+1:POKE seg%,
    se%:LOCATE 7,1:PRINT USING "#####";sc%:SOUND
    1+128,5Ø,Ø,1,1
32Ø IF se%=25Ø THEN GOTO 1Ø1Ø
33Ø IF INKEY(28)=Ø THEN d%=1
34Ø IF INKEY(3Ø)=Ø THEN d%=2
35Ø IF INKEY(71)=Ø THEN d%=3
36Ø IF INKEY(63)=Ø THEN d%=4
37Ø IF d%=1 THEN y%=y%-1
38Ø IF d%=2 THEN y%=y%+1
39Ø IF d%=3 THEN x%=x%-1
4ØØ IF d%=4 THEN x%=x%+1
41Ø IF y%=2 OR y%=24 OR x%=Ø OR x%=39 THEN GOTO
    76Ø
42Ø IF i%=3 THEN GOTO 76Ø
43Ø POKE dir%,d%:POKE nxc%,x%:POKE nyc%,y%
44Ø CALL &9ØØØ:FOR i%=1 TO sp%:NEXT:GOTO 27Ø
45Ø REM Initialise
46Ø addr=&A4ØØ
47Ø hi%=Ø:se%=3:sp%=1ØØ
48Ø ENV 1,7,2,2,2,Ø,2,15,-1,3
49Ø ENV 2,7,2,3,2Ø,Ø,5,15,-1,2Ø
5ØØ ENT 1,1Ø,3,3,1Ø,-4,3,1Ø,5,3,1Ø,-6,3
```

Author, author!

– Jeremy Fox-Geen, author of 'Isotopes', talks about his program

'I bought my CPC 6128 about three years ago, upgrading from my much used Speccy. I'd tried programming on the Spectrum but its 'button' keyboard and poor BASIC didn't help, so my CPC was valuable on both scores. During those three years I learnt how to program proficiently in both BASIC and machine code – which was tricky but not impossible.

I wrote 'Isotopes' as the first test of my new machine code skills, but I didn't want to write it all in machine code. I wanted the mundane bits, such as the scoring and key testing routines, in BASIC because I find it easier just to use machine code for the routines requiring speed. I had to use some variables in both the machine code and BASIC sections – for instance in the number of segments in the robot, seg%. After a bit of fiddling I found that the easiest way to do this was to use the command POKE to put the variable values into a specific area of memory set up at the beginning of the program (51Ø-55Ø).

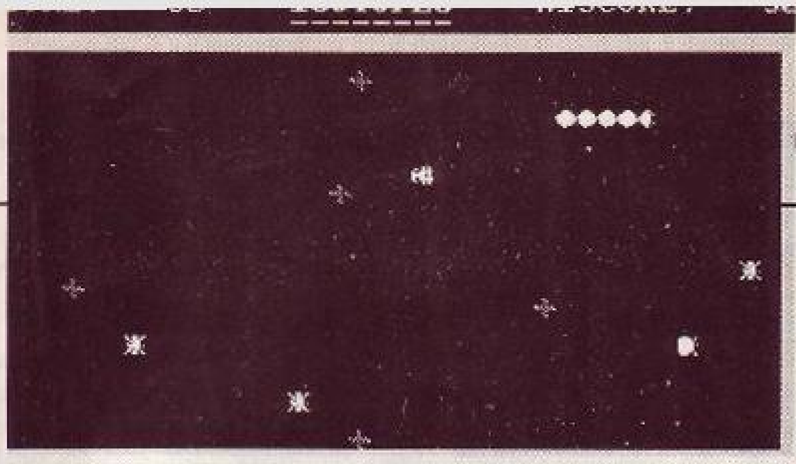
Line 2Ø is interesting. I needed a random number generator in the machine code to decide whether to print an object on the screen. After a quick call to a friend I converted a 65Ø2 assembler program into Z8Ø mnemonics. It needs six bytes of random numbers to start from, which need to be changed each time the game is run, otherwise the objects appear in the same positions on the screen every game. This is because no random number routine is truly random: the numbers just follow a complex pattern, so if the seed isn't changed the pattern recurs.


▲ 15 year old Jeremy Fox-Geen, author of 'Isotopes'

'I've always had trouble with title screens (4Ø-21Ø), sound effects (48Ø-5ØØ) and graphics (machine code), so I was pleased with how they turned out. Sound is hardest, and there's no easy way round it.

'I wanted the robot to keep moving in the same direction even when a key had been released – as in Atari's *PacMan* – so I gave the variable d% a value from 1 to 4 (33Ø-36Ø), depending on which key had been pressed, and moved the robot according to the value of this variable (37Ø-4ØØ). Because the variable keeps its value after a key has been released, the robot continues moving in the same direction.

Finally I provided a change speed option (2ØØ), so 'Isotopes' should provide lasting entertainment for all ability levels. Hope you enjoy it!'



● Isotope: what it looks like when you've finished

```
51Ø seg%=addr
52Ø nxc%=addr+1
53Ø nyc%=addr+2
54Ø dir%=addr+3
55Ø chk%=addr+4
56Ø MODE 1
57Ø MEMORY &8FFF
58Ø SYMBOL 255,255,255,255,255,255,255,255,255
59Ø FOR I%=Ø TO 3:READ A:INK I%,A:NEXT
6ØØ DATA Ø,14,6,24
61Ø PRINT "Please wait....":GOSUB 178Ø
62Ø FOR i%=&93E2 TO &94ØØ:POKE i%,16:NEXT
63Ø CLS:BORDER 1:RETURN
64Ø PEN 2:PAPER Ø:CLS
65Ø LOCATE 1,3:PRINT STRING$(4Ø,255);
66Ø FOR i%=3 TO 25
67Ø LOCATE 1,i%:PRINT CHR$(255);
68Ø LOCATE 4Ø,i%:PRINT CHR$(255);
69Ø NEXT
7ØØ LOCATE 1,25:PRINT STRING$(4Ø,255);
71Ø LOCATE 1,1:PRINT "SCORE:";USING "#####";sc%
72Ø LOCATE 28,1:PRINT "HISCORE:";USING "#####";hi%
73Ø LOCATE 16,1:PEN 3:PRINT "ISOTOPES"
74Ø LOCATE 16,2:PRINT "--------":PEN 2
75Ø RETURN
76Ø REM Dead Routine
77Ø SOUND 2,5ØØ,Ø,1,2,1,31
78Ø SOUND 4,5ØØ,1ØØ,1Ø,Ø,1,25
79Ø FOR a=1 TO PEEK(seg%):FOR b=1 TO 35:NEXT:CALL
    &9ØØØ:NEXT
8ØØ LOCATE 16,15:PRINT "GAME OVER"
81Ø LOCATE 9,25:PRINT "Press <SPACE> to continue"
82Ø IF sc%>hi% THEN hi%=sc%:LOCATE 36,1:PRINT
    USING "#####";hi%;
83Ø FOR i%=1 TO 2ØØ:NEXT
84Ø SOUND 4+128,5ØØ,Ø,1,2,1,29
85Ø WHILE INKEY(47)<>Ø:WEND
86Ø CLS:GOTO 4Ø
87Ø REM Instructions
88Ø WINDOW SWAP Ø,1
89Ø PAPER Ø:CLS:PEN 3:LOCATE 8,2
9ØØ CLS
91Ø PRINT:PRINT:PRINT "The keys are:"
92Ø PEN 3
93Ø LOCATE 14,7:PRINT ";........up"
94Ø LOCATE 14,9:PRINT "/......down"
95Ø LOCATE 14,11:PRINT "Z......left"
96Ø LOCATE 14,13:PRINT "X.....right"
97Ø PEN 2
98Ø LOCATE 9,25:PRINT "Press <SPACE> to play"
99Ø WHILE INKEY(47)<>Ø:WEND
1ØØØ GOTO 23Ø
1Ø1Ø REM Completed
1Ø2Ø CLS
1Ø3Ø PEN 1
1Ø4Ø LOCATE 15,3:PRINT "WELL DONE!"
1Ø5Ø LOCATE 15,4:PRINT "----------"
1Ø6Ø PEN 2
1Ø7Ø LOCATE 6,25:PRINT "Press <SPACE> to play
    again."
1Ø8Ø i%=1
1Ø9Ø WHILE INKEY(47)<>Ø:INK 1,i%:i%=i%+1:FOR o%=1
    TO 5Ø:NEXT:IF i%=27 THEN i%=1
11ØØ WEND
111Ø INK 1,14
112Ø CLS:GOTO 4Ø
113Ø DATA CDDA9ØCD3E9ØCD1391CD7Ø9ØCD7DD
114Ø DATA AA9ØC9F32153914323231ØFC4E5DE
115Ø DATA 234621E294Ø942231ØFD7EFBC95BD
116Ø DATA F32153914323231ØFC4E234621465
117Ø DATA E294Ø942231ØFD77FBC93AØ1A46ØB
118Ø DATA 573AØ2A45FD5CD1Ø9Ø32Ø4A4D1583
119Ø DATA 3EØ1CD279Ø21ØØØØ3AØØA46FØ1332
12ØØ DATA E293Ø92B5621ØØØØ6FØ1DC92Ø94Ø7
121Ø DATA 2B5E3EØØCD279ØC9CD9B9257FE663
122Ø DATA Ø2F8FE27F27Ø9ØCD9B925FFEØ476C
123Ø DATA FA7C9ØFE18FØD5CD1Ø9ØD1FEØØ81D
124Ø DATA CØ3EØ2D5CD279ØD1CD9B92FEØ7729
125Ø DATA FA979ØFEØBF2979Ø626BCD5B927CA
126Ø DATA C9CD9B92FEØ5F8FE6EFØCD9B92914
127Ø DATA FEØ2F8FE27FØ57CD9B92FEØ4F8858
128Ø DATA FE18FØ5FCD1Ø9ØFEØØCØ3EØ3CD69E
129Ø DATA 279Ø626B3EØBCD5B92C9F33AØØ57D
13ØØ DATA A421ØØØØ6FØ1E293Ø92B477E233C6
131Ø DATA 772B2B1ØF93AØØA421ØØØØ6FØ1345
132Ø DATA DC92Ø92B477E23772B2B1ØF93A49A
133Ø DATA Ø1A421E293773AØ2A421DC9277598
134Ø DATA FBC93AE293673ADC926F3AØ3A46D2
135Ø DATA CD5B923AØØA421ØØØØ6FØ1E29349E
136Ø DATA Ø92B5621ØØØØ6FØ1DC92Ø92B5E31B
137Ø DATA 626B3EØØCD5B9221E293237E57553
138Ø DATA 21DC92237E5F626B3EØ5CD5B92559
139Ø DATA C928ØØ5ØØØ78ØØAØØØC8ØØFØØØ411
14ØØ DATA 18Ø14ØØ168Ø19ØØ1B8Ø1EØØ1Ø82F6
141Ø DATA Ø23ØØ258Ø28ØØ2A8Ø2DØØ2F8Ø2386
142Ø DATA 2ØØ348Ø37ØØ398Ø3CØØ39B91AB416
143Ø DATA 91BB91CB91DB91EB91FB91ØB9284A
144Ø DATA 1B922B923B924B92ØØØØØØØØØØ314
145Ø DATA ØØØØØØØØØØØØØØØØØØØØØØØØØØØØØ
146Ø DATA Ø2Ø4Ø6Ø63CC37EE736C6138CØ1412
147Ø DATA Ø8Ø1Ø8138C36C67EE73CC3Ø6Ø641C
148Ø DATA Ø2Ø4ØØØØØ1Ø8Ø38C16CE1ØE31Ø285
149Ø DATA E316CEØ38CØ1Ø8Ø1Ø813ØC3786344
15ØØ DATA 7C8Ø7C8Ø378613ØCØ1Ø8Ø1883Ø396
151Ø DATA CØ7ØEØF8E178F17ØEØ3ØCØ11Ø87AB
152Ø DATA ØØØ6Ø1Ø887Ø8Ø11FØ1Ø88FØ8Ø115F
153Ø DATA 1EØ1Ø8ØØ8F4Ø8F91FFFF8FFF8F631
154Ø DATA 91FF4Ø8FØØ8F7ØØ3F786F3C8F178A
155Ø DATA C9F1CAF3C8F7867ØØ31ØØØØØØ8647
156Ø DATA Ø1ØØ8AØAØ515ØØØ8Ø1ØØØØ8Ø911C9
157Ø DATA 9851A821CØ41C234C1214851A85CC
158Ø DATA 919831C47368D75ØBC9ØE8FØBØ7F4
159Ø DATA BØ5Ø6Ø3ØCØF5CD1ABCF1E51183752
16ØØ DATA 91FEØØCA719213133DFEØØC2695E8
161Ø DATA 92Ø6Ø2ØEØ8626B5E2356E1C51A414
162Ø DATA 7713231ØFAC1C52B1ØFDC13EØ857C
163Ø DATA 84673ØØ6C5Ø15ØCØØ9C1ØDC5C2555
164Ø DATA 7C92C1C93F21Ø5ØØØ1Ø5A4Ø97E42E
165Ø DATA 4F2B7E472B2B2B7E888932Ø5A442A
166Ø DATA 21Ø4ØØØ1Ø5A4Ø9Ø6Ø57E23772B226
167Ø DATA 2B1ØF9C921E194Ø1E8Ø32336ØØ4D8
168Ø DATA 793D4FFEFFC2C892783D47FEFF817
169Ø DATA C2C892C917171717171717ØØØØ386
178Ø m=&9ØØØ:f=Ø
179Ø FOR i=113Ø TO 169Ø STEP 1Ø
18ØØ READ p$:c=Ø
181Ø FOR o=1 TO 26 STEP 2
182Ø b=VAL("&"+MID$(p$,o,2))
183Ø POKE m,b:m=m+1:c=c+b:NEXT
184Ø chk$=RIGHT$(p$,3):chk=VAL("&"+chk$)
185Ø IF c<>chk THEN PRINT "ERROR IN LINE:"i:f=1
186Ø NEXT:IF f=1 THEN END:ELSE RETURN ●
```

Solar System

This hefty program from Grame W Porteous, an astronomy student at Glasgow University, may well inspire you in the extraterrestrial. After entering a time and date into the computer, a scale model of the solar system is drawn. Right ascension and declination figures are also displayed to indicate where to look in the sky for a particular planet. Before you credit the programmer with genius, he would like it pointed out that he got the methods from 'Practical astronomy with your calculator' by Peter Duffet-Smith.

Because of the size of the subject matter, the author regrets that the information is presented on *two* screens. Now there's an understatement... Pressing C after the first screen will lose it for 64K machine owners. However, lucky 128K owners will have this screen preserved (if BANKMAN has been run).

The second screen is then drawn, and pressing S toggles between them.

```
5 'Solar System
6 'Graeme Watt Porteous
7 'Amstrad Action December 1988
1Ø DATA 1,114.7122,1Ø2.972,Ø.Ø16773,1.ØØØØ18,Ø,Ø
2Ø DATA Ø.24Ø85,2Ø9.6643,77.434,Ø.2Ø5629,Ø.387Ø99
   ,48.35Ø,7.ØØ59
3Ø DATA Ø.61519,67.1413,131.7Ø,Ø.ØØ6772,Ø.723326
   ,76.723,3.3947
4Ø DATA 1.88Ø7,11.8733,335.942,Ø.Ø93298,1.523638
   ,49.6Ø4,1.85Ø9
5Ø DATA 11.861,3ØØ.3429,15.662,Ø.Ø48Ø58,5.2Ø248
   ,1ØØ.467,1.3Ø47
6Ø DATA 29.57,227.2512,93.444,Ø.Ø5Ø916,9.56329
   ,113.713,2.4846
7Ø DATA 84.746,249.2488,177.Ø48,Ø.Ø47285,19.2937
   ,74.Ø56,Ø.7746
8Ø DATA 166.57,272.2648,357.Ø7,Ø.ØØ6851,3Ø.2743
   ,131.8,1.7693
9Ø DATA 249.98,217.4574,224.499,Ø.252786,39.6823
   ,11Ø.421,17.1313
1ØØ PEN 1:INK Ø,Ø:BORDER Ø,Ø:DIM D(9,13)
11Ø FOR H=1 TO 9:FOR L=1 TO 7:READ C:D(H,L)=C:NEXT
   L:NEXT H
12Ø MODE 1:LOCATE 11,2:PRINT"PLANETARY POSITIONS"
   :GOSUB 21ØØ
13Ø PRINT:PRINT:INPUT"YEAR  ";Y:Y$=STR$(Y):Y$=MID$
   (Y$,2,LEN(Y$))
14Ø INPUT"MONTH ";M:WHILE M<1 OR M>12:GOTO 14Ø:
   WEND:MN=M:MN$=STR$(MN):IF LEN(MN$)=2 THEN MN$=
   "Ø"+MID$(MN$,2,1) ELSE MN$=MID$(MN$,2,2)
15Ø INPUT"DAY   ";DA:WHILE DA<1 OR DA>31:GOTO 15Ø:
   WEND:DA$=STR$(DA):IF LEN(DA$)=2 THEN DA$="Ø"+
   MID$(DA$,2,1) ELSE DA$=MID$(DA$,2,2)
16Ø INPUT"HOUR  ";HR:WHILE HR<Ø OR HR>23:GOTO 16Ø:
   WEND:HOUR=HR*(1/24):HR$=STR$(HR):IF LEN(HR$)=2
   THEN HR$="Ø"+MID$(HR$,2,1) ELSE HR$=MID$(HR$,2,2)
17Ø INPUT"MINUTE";MI:WHILE MI<Ø OR MI>59:GOTO 17Ø:
   WEND:MINUTE=MI*(1/144Ø):MI$=STR$(MI):IF LEN
   (MI$)=2 THEN MI$="Ø"+MID$(MI$,2,1) ELSE MI$=
   MID$(MI$,2,2)
18Ø IF M=1 OR M=2 THEN GOSUB 1ØØØ
19Ø A=INT(Y/1ØØ):B=2-A+INT(A/4):C=INT(365.25*Y):
   D=INT(3Ø.6ØØ1*(M+1))+B+C+DA+HOUR+MINUTE-
   725Ø85.75
2ØØ MODE 1:DEG
21Ø LOCATE 9,1:PRINT"MERCURY/VENUS/EARTH/MARS"
22Ø LOCATE 1,4:PRINT"DATE:";DA$;"/";MN$;"/";Y$:
   LOCATE 1,6:PRINT"TIME:";HR$;"h ";MI$;"m"
23Ø ORIGIN 435,16Ø:FOR AN=1 TO 36Ø STEP 12:PLOT
   2*COS(AN),2*SIN(AN),1:NEXT
24Ø INK 2,1Ø:FOR AN=1 TO 5Ø:PLOT 195+AN,Ø:NEXT AN
25Ø FOR P=1 TO 9:GOSUB 7ØØ:NEXT P
26Ø FOR P=2 TO 9
27Ø T=SIN(D(P,8)-D(P,6))*SIN(D(P,7)):D(P,11)=ATN
   (T/SQR(-T*T+1))
28Ø Y=SIN(D(P,8)-D(P,6))*COS(D(P,7))
29Ø X=COS(D(P,8)-D(P,6))
3ØØ F=ATN(Y/X):GOSUB 1Ø1Ø
31Ø D(P,12)=F+D(P,6):D(P,13)=D(P,1Ø)*COS(D(P,11))
32Ø NEXT P
33Ø FOR P=2 TO 3
34Ø A=ATN((D(P,13)*SIN(D(1,8)-D(P,12)))/(D(1,1Ø)-
   D(P,13)*COS(D(1,8)-D(P,12))))
35Ø L=18Ø+D(1,8)+A:IF L<Ø THEN L=L+36Ø
36Ø IF L>36Ø THEN L=L-36Ø
37Ø B=ATN((D(P,13)*TAN(D(P,11))*SIN(L-D(P,12)))/
   (D(1,1Ø)*SIN(D(P,12)-D(1,8)))):GOSUB 121Ø
38Ø PEN 1:IF P=2 THEN LOCATE 1,9:PRINT"MERCURY":
   L=1Ø:GOSUB 65Ø
39Ø PEN 1:IF P=3 THEN LOCATE 1,13:PRINT"VENUS":L=
   14:GOSUB 65Ø
4ØØ NEXT P
41Ø P=4:GOSUB 67Ø:GOSUB 121Ø
42Ø PEN 1:LOCATE 1,17:PRINT"MARS":L=18:GOSUB 65Ø
43Ø S=1ØØ
44Ø FOR P=1 TO 4:GOSUB 15ØØ:GOSUB 8ØØ:NEXT P
45Ø PRINT CHR$(7)
46Ø A$=INKEY$:IF A$<>"S" AND A$<>"s" AND A$<>"C"
   AND A$<>"c" THEN GOTO 46Ø
47Ø IF A$="S" OR A$="s" THEN |SCREENSWAP,1,2
48Ø MODE 1:DEG:ORIGIN 38Ø,16Ø:PEN 1:LOCATE 1,1:
   PRINT"EARTH/JUPITER/SATURN":LOCATE 1,2:PRINT
   "URANUS/NEPTUNE/PLUTO":FOR AN=1 TO 36Ø STEP 36
   :PLOT 1*COS(AN),1*SIN(AN),1:NEXT
49Ø FOR AN=1 TO 36Ø STEP 36:PLOT 1*COS(AN),1*SIN
   (AN),1:NEXT
5ØØ FOR AN=1 TO 25:PLOT 25Ø+AN,Ø:NEXT AN
51Ø PEN 1:P=5:GOSUB 67Ø:GOSUB 121Ø:LOCATE 1,5:
   PRINT"JUPITER":L=6:GOSUB 65Ø
52Ø PEN 1:P=6:GOSUB 67Ø:GOSUB 121Ø:LOCATE 1,9:
   PRINT"SATURN":L=1Ø:GOSUB 65Ø
53Ø PEN 1:P=7:GOSUB 67Ø:GOSUB 121Ø:LOCATE 1,13:
   PRINT"URANUS":L=14:GOSUB 65Ø
54Ø PEN 1:P=8:GOSUB 67Ø:GOSUB 121Ø:LOCATE 1,17:
   PRINT"NEPTUNE":L=18:GOSUB 65Ø
55Ø PEN 1:P=9:GOSUB 67Ø:GOSUB 121Ø:LOCATE 1,21:
   PRINT"PLUTO":L=22:GOSUB 65Ø
56Ø S=5:P=1:K=28
57Ø GOSUB 8ØØ
58Ø S=5
59Ø FOR P=5 TO 9
6ØØ GOSUB 155Ø:GOSUB 8ØØ
61Ø NEXT P:PRINT CHR$(7)
62Ø A$=INKEY$:IF A$="S" OR A$="s" THEN |SCREENSWAP
   ,1,2:GOTO 62Ø
63Ø IF A$="e" OR A$="E" THEN END
64Ø GOTO 62Ø
65Ø LOCATE 1,L:PEN 2:PRINT"R.A.  ";B$;"h ";B1$;
   "m":LOCATE 1,L+1:PEN 3:PRINT"DEC. ";SD$;C$;
   "d ";C1$;"m"
66Ø RETURN
67Ø L=ATN(D(1,1Ø)*SIN(D(P,12)-D(1,8))/(D(P,13)-D
   (1,1Ø)*COS(D(P,12)-D(1,8))))+D(P,12):IF L>36Ø
   THEN L=L-36Ø
68Ø IF L<Ø THEN L=L+36Ø
```

Solar System continues on page 80

!! NOW SPEEDTRANS PLUS HAS EVEN MORE TO OFFER !!

SPEEDTRANS PLUS2

For CPC6128 (or 464/664 with DK Tronics 64K (or larger) Memory)
Once the programs has been transferred to disc IT WILL RUN ON ANY CPC.

SPEEDTRANS PLUS2 now handles the VERY LATEST Speedlock types automatically. No need to hold a key down at anytime during loading. SPEEDTRANS PLUS2 also saves 99% of opening screens and saves them in their full colours.

FULLY AUTOMATIC – JUST ONE KEYPRESS * ONLY ONE PROGRAM TO RUN WHICH FINDS THE SPEEDLOCK TYPE AUTOMATICALLY * WILL TRANSFER ORIGINAL AND MANY OF TODAYS SPEEDLOCK PROGRAMS * NO FIDDLING OR MEDDLING – WRITTEN WITH THE AMATEUR IN MIND * AUTOMATIC DISC FILENAMES * NO WASTED DISC SPACE – SAVES THE CORRECT AMOUNT OF GAME CODE * SAVES 99% OF OPENING SCREENS * SCREENS SAVED IN THEIR CORRECT COLOURS * COMPRESSES SCREEN CODE TO SAVE EVEN MORE DISC SPACE * FASTER LOADING TIMES FROM DISC BECAUSE OF SHORTER FILE LENGTHS

SPEEDTRANS PLUS2 transfers over 200 programs to Disc, some of the latest it will do are MADBALLS, FREDDY HARDEST (both games) BASKET MASTER, MATCHDAY II, PHANTOM CLUB, GRYZOR (main program), SUPER HANG ON.

These latest Speedlock types can be identified by the whole screen flashing with horizontal bands of colour immediately after the first file has loaded. Do remember that **SPEEDTRANS PLUS2** does not save all the memory in the hope of having saved all the game. It saves exactly the right length of code. All screens are saved in compressed form – some as little as 4K (Basket Master) - thus saving even more disc space.

SPEEDTRANS PLUS2 is the most sophisticated Tape-to-Disc transfer utility for SPEEDLOCK protected programs ever published. It will certainly transfer more games than any other Speedlock transfer program on the market and with much greater ease. Other transfer programs require you to know how long the game code is so that you may run an alternative program for the long games which does not save the loading screen. This is done because they do not make use of the extra memory available on the CPC 6128 or from the use of an extra RAMPACK (DK Tronics 64K or greater.) This program is highly intelligent in that it first reads the loader from the tape and establishes which type of protection is in use from 6 alternatives. At the end of the loadit then finds out how long the code is and if it is too long to be saved to one file it will move the excess code into the banked memory and save the game in two parts and write the appropriate loader program. The screen will also be moved into a bank and compressed before saving. This can mean screen files as small as 4k (Basket Master) depending on mode and content. All this adds up to a lot less disc space being used than with other transfer programs and you will nearly always get the loading screen saved. The exception to this is when there is no loading screen (as in SCRABBLE) or when the screen is blanked out and more code is loaded into the screen memory, as in BMX SIMULATOR and MADBALLS for example. Try getting a screen with Multiface or any other imager. These imagers are only capable of saving what you have in memory at the time the button is pressed. What happens in multi part games? you have to press the button for each part thus wasting precious disc space. They also save far too much code and therefore waste even more space and saving too much code means longer loading times from disc. Programmers are now checking to see if you have an imager plugged in an if you have the program will not load. Imagers also have to be in place before you can reload your program and saved programs can only be reloaded in to the machine in which they are saved. **SPEEDTRANS PLUS2** creates totally stand-alone files and if you have nother CPC even without extra memory they wil run prefectly. It also displays the saving name on screen at the start of the load with all except the very latest games. In all cases the disc saving name is displayed while the save is carried out. To run the transferred game just RUN this name. Another intelligent feature of **SPEEDTRANS2** is that the very first thing it does is to find out which drive it is in. This means that if you have a two drive system you may run the program from drive B by typing RUN "B:DISC" or :B:RUN"DISC. However the saving will ALWAYS be to DRIVE A so with a single drive you must change the disc when prompted on screen.

DISC:- UK £14.99 – EUROPE £16.25 – REST OF WORLD £17.00
Upgrade your SPEEDTRANS PLUS –send your disc together with: **UK £2.00 – EUROPE £3.25 – REST OF WORLD £4.00**
Upgrade your SPEEDTRANS TAPE send your tape together with: **UK £12.00 – EUROPE £13.25 – REST OF WORLD £14.00**

LOW LOW PRICES ARNOR SOFTWARE *LOW LOW PRICES*

Program	UK – Disc	Eprom	Europe – Disc	Eprom	Rest of World – Disc	Eprom
PROTEXT OFFICE *NEW*	27.00	N/A	28.25	N/A	29.00	N/A
PROTEXT FILER *NEW*	19.00	N/A	20.25	N/A	21.00	N/A
PROTEXT	20.00	30.00	21.25	31.25	22.00	32.00
PROSPELL	19.00	27.00	20.25	28.25	21.00	29.00
PROMERGE (ROM=PROMERGE PLUS)	19.00	27.00	20.25	28.25	21.00	29.00
MAXAM *THE BEST!*	20.00	31.00	21.25	32.25	22.00	33.00
MAXAM 1 1/2 *NEW*	N/A	23.00	N/A	24.25	N/A	25.00
UTOPIA	N/A	23.00	N/A	24.25	N/A	25.00

ROMBO ROMBOARD UK – £28.00 EUROPE – £30.00 REST OF THE WORLD – £31.00

DMP 2000/2160/3000/3160

The printer buffer presently in the DMP 200/3000 series is a 2K RAM. Most of this RAM is used by the printer's operating system leaving an average 1/2K as buffer space. Our upgrade kit contains a new static RAM chip which will increase the printer buffer by 6K (about 4 pages of text). This upgrade allows all Download Characters to be re-defined allowing the user to design special characters for use with scientific and other programs. The kit is supplied with full pictorial instructions to allow the amateur to carry out his own modification (the DMP2160 takes about 7 minutes). If you don't think you are up to it your local TV shop can do the job in approximately 15 minutes

UK £12.50 – EUROPE £13.75 – R. of W. £14.50

FIRETRANS

This utility will transfer a number of FIREBIRD programs from tape to disc automatically including most opening screens in full colour. FIRETRANS will work equally well from tape but will be more convenient to use if converted to disc with SAMSON/Transmat. It will transfer WILLOW PATTERN, RUNESTONE, CHIMERA, GUNSTAR, PARABOLA, REALM, SPIKY HAROLD, BOOTY, DON'T PANIC, GUNFRIGHT, STARGLIDER, NINJA MASTER, HELICOPTER, and some version of THRUST, HARVEY HEADBANGER and BOMBSCARE.

TAPE:- UK £5.00 – EUROPE £6.25 R. of W. £7.00
DISC:- UK £8.50 – EUROPE £9.75 – R. of W. £10.50

NEW COMPACTOR NEW

COMPACTOR will allow you to load a standard 17K screen, set the mode, border and ink colours and then save it as a compressed screen contianing its own mode and ink colour information. Most screens compact down to an average of 9K which is an enormous saving on disc space. Loading time of compressed screens is also proportionately reduced.

TAPE:- UK £5.00 – EUROPE £6.25 R. of W. £7.00
DISC:- UK £8.50 – EUROPE £9.75 – R. of W. £10.50

TRANSIT

TRANSIT is a disc-to-disc file copier which handles file upto 40K in length in one pass. It will copy from drives A-A, A-B, B-B and B-A making an ideal utility for use with 5 1/4" second drive.

TAPE:- UK £4.50 – EUROPE £5.25 – R. of W. £6.50
DISC:- UK £8.00 – EUROPE £9.25 – R. of W. £10.00

UTILITY DISC No. 1

This utility disc contains 5 programs, all menu driven. They are SAMSON, TRANSIT, QCLÔNE, VIEWTEXT and the fast disc FORMATTER.

DISC:- UK £15.50 – EUROPE £16.75 – R. of W. £17.50
ROM:- UK £17.25 – EUROPE £18.50 – R. of W. £19.25

ADVANCED MUSIC SYSTEM

When you buy Rainbird's Advanced Music System from us we will give you

ABSOLUTELY FREE OF CHARGE

A disk containing THE GOLDMARK COLLECTION of virtuoso demonstration music files by Rob Baxter some of which have been written especially for us

UK £26.00 – EUROPE £27.25 R.of W. £28.00

NEW NIRVANA NEW

Have you tried backing up your original expensive disc software and failed? Use NIRVANA before its too late! NIRVANA (meaning enlightenment) is an extremely powerful disc handling utility which has the following features: Disc to disc back-up copier which will handle most of the commercially protected discs available today. File copier for individual files. Disc formatter, much easier to use than CPM. Change file attributes. Erase files. Change filenames. Will handle all disc drive combinations

DISC:- UK £14.99 – EUROPE £16.25 – R. of W. £17.00

NEW SHAREPLAY NEW

THE STOCK MARKET SIMULATION
(All CPC's)

This is a serious educatinal program for 1 to 6 players and provides all the enjoyment of playing the stockmarket without any risk of personal bankruptcy! Each player can buy and sell shares and the target is the first to reach £1,000,000. The program includes a stockholding portfolio listing the shares purchased, their number, cost and market value. Bank balances are also shown. Graphical representation of market fluctuations are given in the form of a bar graph. Also included is a high score table. Scores are automatically saved at the end of each session.

DISC:- UK £12.00 – EUROPE £13.25 – R. of W. £14.00

NEW WORDSEEK NEW

THE WORDSEARCH PROGRAM
(All CPC's)

This educational program will tax even the most agile mind. The aim is to find the hidden words in a 15 by 15 puzzle within a set time limit of 30 seconds. The time limit is extended for every correct letter of the current word found. You may create your own puzzle consisting of up to 10 words which can be saved to disc and used at any time. You may only retain one puzzle at a time but if you choose not to use your own puzzle then the program will randomly select one form the library of 50 on the disc. All of the puzzles in the library are made up of 10 words each consisting of 1x8 letter, 1x7 letter, 2x6 letter, 3x5 letter, 2x4 letter and 1x3 letter words. This ensures equal difficulty regardless which one is randomly loaded. The program contains a print option (for Epson compatible printers) allowing a hard copy to be made of any puzzle created. Keyboard/Joystick options are also available.

DISC ONLY – U.K. £12.00 – EUROPE £13.25
REST OF THE WORLD £14.00

NEW TUNESMITH NEW

TUNESMITH is a simple to use sound utility which allows you to use the keyboard to play and record your tunes. No knowledge of music or Amstrad sound commands is required all you need to be able to do is whistle the tune you play or record. The octave and period of notes is variable and the program includes synthesizer and vibrato effects. **TUNESMITH** will save any tune as a basic file which can be RUN, CHAINED or MERGED into your own program.

DISC:- UK £12.00 – EUROPE £13.25 R. of W. £14.00

SAMSON

SAMSON has been developed by us to transfer not only the normal programs but also many of todays where the code is much longer. **SAMSON** differs in many ways from other Tape-to-Disc utilities, the main differences being: * SAMSON retains original file suffixes (SAMSON.SCN will be saved as SAMSON.SCN) * Improved file relocation method * Elaborate Tape-read/Disc-write system which reduces Tape Motor, Slave Replay and Disc Drive Motor wear substantially. * A large reduction in tape transfer time is also achieved in all but a few cases * NEW "SPLIT" option for todays longer games (we will be using this option in future routines) * All file information is displayed on screen and can be echoed to your printer if needed. SAMSON also transfer itself to disc.

TAPE:- UK £7.50 – EUROPE £8.75 – R. of W. £9.50
DISC:- UK £11.50 – EUROPE £12.75 – R. of W. £13.50

CHARACTER DESIGNER

(All CPC's)

- **REDEFINE YOUR PRINTER DOWNLOAD CHARACTERS**
- **REDEFINE THE COMPUTER SCREEN FONT**
- **REDEFINE ANY/ALL KEYBOARD KEYS (ASWERTY)**
- **DESIGN SPECIAL SCIENTIFIC CHARACTERS/FONTS**

Takes all the hard work out of character designing making it a pleasure. The printer part of the program will only work if your printer is capable of DOWNLOADING and is EPSON compatible – see your printer manual. Works with 7-bit or 8-bit output (8-bit port). All the designing is done "On-Screen" so you can see exactly what you are doing. You can save your newly designed characters to disc and reload them at any time into a basic program and into most Word-Processors. The program also allows the user to redefine any or all of the keys on the keyboard. This feature will be useful for those who require an ASWERTY keyboard. The disc also contins twelve sample fonts for experimentation

TAPE:- UK £7.99 EUROPE £9.25 – R. of W. £10.00
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PILGRIM

All adventurers welcome!

Welcome to the last Pilgrim column of 1988, and the last in the current series. Next month, we'll be launching a whole new column, featuring regular features and the exclusive *Amstrad Adventurer of The Year* competition. Meanwhile, feast your eyes on *Corruption* (converted for us at last), the Paladin's Players' Guide to *Gnome Ranger*, the Pilg's awards for Best Game of 1988, and much more....

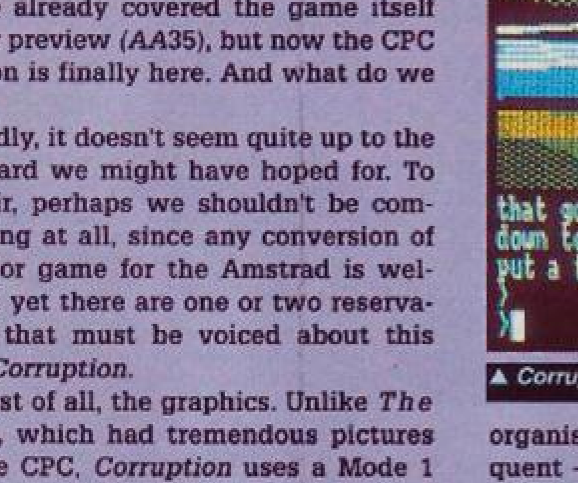
CORRUPTION

Magnetic Scrolls ● 01 631 5373
£19.95 ● 6128 only

It's here! Those of us dying to indulge in a spot of insider dealing, detective work and derring-do in the City can at last get down to a game of *Corruption*. We've already covered the game itself in our preview (*AA*35), but now the CPC version is finally here. And what do we find?

Sadly, it doesn't seem quite up to the standard we might have hoped for. To be fair, perhaps we shouldn't be complaining at all, since any conversion of a major game for the Amstrad is welcome: yet there are one or two reservations that must be voiced about this here *Corruption*.

First of all, the graphics. Unlike *The Pawn*, which had tremendous pictures on the CPC, *Corruption* uses a Mode 1 colour display that doesn't have the resolution to do justice to the famous Magnetic Scrolls artwork. You might think that colour was preferable in any case, but since many adventurers play their games in 80-column format (6128 owners in particular), it seems that a really state-of-the-art Mode 2 mono display might have been more impressive. The pictures aren't bad, but they're not up to the usual brilliance we have come to expect from this company.



The other problem is the speed and the way the program has been organised on the disk. There are frequent – no, let me rephrase that: *very* frequent disk accesses, and the program seems to go into this suspended animation for brief but intensely irritating periods after almost every entry. You also have to do a fair amount of disk-flipping, which doesn't help.



▲ *Corruption:* a Yuppie's fantasy – or nightmare?

On the other hand, it must be admitted at once that *Corruption*, despite these grumbles, is still one of the best games for the CPC in recent months, ranking alongside *Ingrid's Back* as that rare item, a truly compelling game. Experienced adventurers may find the scenario somewhat limited – the map isn't that large and there aren't many major juicy puzzles you can really get your teeth into – but there are lots of diversions and a strong sense of atmosphere to keep you going.

All in all, then, *Corruption* is a worthy rather than a classic release from Magnetic Scrolls. Perhaps this is an instance of what might be term a 'problem of success': produce work such as *The Pawn* and *The Guild of Thieves* and people start expecting high quality games every outing. *Corruption* doesn't quite match those adventures: but then, it's by no means a poor game. ●



▲ Not quite a classic perhaps, but a welcome conversion to the CPC anyway

ATMOSPHERE	92%
INTERACTION	90%
CHALLENAGE	82%
AA RATING	89%

1988 – TRICKS AND TREATS

THE PILGRIM takes a brief backward glance, and points the way forward for 1989 – but not at the same time, you understand. That would be silly.

Goodbye 1988 and good riddance! Well, really! What other year brought such delightful news as:

- Infocom announcing that they weren't going to continue releasing Amstrad versions of new products.
- Electronic Arts, although converting *Bard's Tale* to the CPC's, announcing that they would probably not be repeating the excercise with *BTII* and *BTIII*.
- *GAC+* vanishing, to be replaced by STAC for ST users.
- the number of top-quality adventures released for the CPC steadily dwindling?

Let's face it. We Amstrad adventurers are getting angry!

Calm down now, Pilgy. Let's be a little more circumspect. Was it really as bad as all that? This year also brought us *Guild of Thieves, Jinxter, Ingrid's Back*, and a host of better-than-ever home-brew games such as *The Mixed-Up Shymer* and *Jekyll and Hyde*. That can't be too bad, can it?

What's more, the games we play are undoubtedly reaching new levels of lasting interest and technical complexity. Take characters for example. *Ingrid's Back* really does enter new realms of character command for Amstrad owners. Level 9 will never abandon the Amstrad format as long as we go on buying their games, and they can still weave a great story.

And graphics. Although you can sample Magnetic Scrolls product only on a 6128, the standard of graphics generally has been rising dramatically. Even the Austins are now getting their act together and games are getting prettier to look at every month.

Nope. If you're feeling down about adventures, cheer up! The Pilg is prepared to bet that next year's column will be fuller and brighter than ever. We're going to start the New Year with a whole new column-style, bursting with features on a regular basis. There'll be prizes for letters, hints and tips, and gossip galore – not to mention the latest reviews of the greatest games.

Not only that, but we'll also be running the stupendous AMSTRAD ADVENTURER OF THE YEAR competition, exclusive to the Pilg's column and *AA* readers. Whatever you do, don't miss it!

And now..ahem... for this year's nominations...

❒ DISAPPOINTMENT OF THE YEAR

Runner up: Mindfighter, which could have been so much better.

Bards Tale II – because it never appeared for the Amstrad.



❒ GRAPHICS OF THE YEAR

Runner up: *Bard's Tale*, for the on-screen presentation and excellent cameo portraits.

Guild of Thieves, without a doubt. With pics like these, who needs reality?

❒ PARSER OF THE YEAR

Runner up: Level 9, for their increasingly sophisticated character command.

Magnetic Scrolls. Anything that lets you put the blue thingummyjig in the red thingummyjig and then shove everything under the table can't be all bad.

❒ ANNOYING PARSER OF THE YEAR

Runner up: Level 9, for their increasingly sophisticated character command that makes all those increasingly infuriating character puzzles possible!

Magnetic Scrolls. Anything that lets you put the blue thingummyjig in the red thingummyjig and then shove eveything under the table is going to drive you nuts! Especially when you can't walk through a door without *banging your nose on it!*

❒ RPG-INFLUENCED GAME OF THE YEAR

Runner up: the Pilg Programming Course, which showed a number of interesting character attributes, but has still to find the space in this column to do combat on a regular basis!

The winner has to be *The Bards Tale*, because there weren't any others!

❒ ADVENTURE OF THE YEAR



Runner-up: *Guild of Thieves*. Great atmosphere, great puzzles, and brilliant graphics.

But the clear winner is *Ingrid's Back*. Awarded for sheer excellence in the character handling department, and for managing (almost) to bring gnomes into the 20th century. If only other companies would support the Amstrad with adventures of this quality!

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The complete guide to *Gnome Ranger*

The second of The Paladin's three part solution

● Part 2 finds you in another cottage's garden. As usual Ingrid has messed things up. To make recompense for what Ingrid did to the tea bush, you must grow another an make the alchemist that cup of tea he wanted. Of course this isn't quite as easy as it would first appear...

● To begin with, peruse the alchemist's library to gain an insight into the game to come, and the story behind 'privetisation'. Plant everything you find in the kitchen (within reason) in the garden. Collect the new grown telelilies and pick leaves and berries etc from the garden plants. Take these to the kitchen.

● To get help from the Greenslave you've grown, you must make an animate potion, the ingredients for which you've just collected. If the potion goes wrong, eat the gunge – and let that be a lesson to you! You can then go and pick some more berries etc and try again.

● At the north end of the road there is a cave and in it is a Stinkwort plant, an ingredient for an antidote to the air plant's poison. Don't enter the cave yourself, as the cave is not as inanimate as it should be, and it isn't a vegetarian either. Instead get someone to hold open the cave's mouth – first remembering plants need compost to grow in and can't stand on bare rock – and send in someone else with the blue telelily to pick a shoot.

● To explore the hilltop to the east, you must wear some Odour le Weedkiller, to get past the hedge (that's something else to make). There's an ingredient to collect on the hill. Use the telelilies you grew to water the beanstalk. If you can't get back past the hedge, get some satisfaction, roll a stone. (Push the rock in other words, with a little help from your friends).

● Once you've produced your potion make sure that you immunize yourself by drinking it. Then send the Treehouse to the the air flower, because if you go yourself, your ugly mug frightens the plant out of reach.

● Now make the fertiliser potion with the air flower and then put it on the tea bush. then finally make a nice fresh cuppa. The brew is made with the obvious, a berry, a leaf, and finally a flower...



Join the Paladin next month for the final part of the solution

CLUE POT

Get those tips coming in! We want to kick off next issue with a really superlative collection, so pop off a postcard now with your clues to *The Pilgrim*, 4 Queen Street, Bath, BA1 1EJ. Don't be shy, be famous!
This month's tips come from: David Liddell, Lanarkshire, Gary Bruce, Glasgow, and – of course – The Pilg.

Wolfman pt 1

The numbers by the lock are linked to letters of the alphabet and read INSERT KEY AND PUSH.
Smell the blue bloom.
Search pool and take bullrush.
Throw flint at skeleton.

Rigels Revenge

Stun gun needs charging – insert plug and pull lever
Fire the flare at the monster
Get past the android by shaking the can and spraying the camera
Examine the documents for a pass card. Use it to open the gate.
The patch is a red herring.

The Big Sleaze

To defeat Kong, take the battery out of the flashlight, make sure you have the model airplane from the corner shop. Take the plane and the battery to the top of the ESB. Insert battery into plane and see what happens.

NEXT MONTH

Be sure not to miss February's new-look *Pilgrim*. And remember, you can write to the Pilgrim c/o *AA*, or leave a message via BT Gold on 83:JNL251

The Lords and Ladies of Adventure

Once again the undying ones come to the help of those less fortunate than themselves. Remember – if you want to make friends around the world, you can apply to join the Lords and Ladies by writing to: *Pilgrim (Lords and Ladies), Amstrad Action*, 4 Queen Street, Bath, BA1 1EJ

Forest at Worlds End, Gremlins, Heroes of Karn, Midnshadow, Message from Andromeda, Never Ending Story, Red Hawk, Spy Trek, Seabase Delta, SubSunk, Warlord, Spellbound, Knight Tyme, Storm Bringer.
Robert Weir, 87 Burnside Rd, Gorebridge, Midlothian, EH23 4ET

Beerhunter, Heroes of Karn, Never Ending Story, plus limited help on Redhawk and Rigels Revenge.
Andrew MacDonald, Brookhouse Farm, Eccleshall, Staffs, ST21 6NE

Never Ending Story, The Hobbit, The Boggit, Warlord, Enchanter, Forest at Worlds End, Marsport, Spellbound, Knight Tyme, Souls of Darkon, Return to Eden, Emerald Isle, Jewels of Babylon, Fantasia Diamond, Seabase Delta, Adventureland, Return to Eden.
Tim Gurney, Lords Hill, Shamley Green, Guildford, Surrey, GU5 0TJ

Hobbit, Lord of the Rings, Knight Orc Part 1, Pawn, Guild of Thieves, Jinxter.
Thomas Sinclair, 265 Calder Street, Govanhill, Glasgow G42 7QG

Forest at Worlds End, Gremlins, Message from Andromeda, Bored of the the Rings, Jewels of Babylon, Warlord, Heroes of Karn, Never Ending Story, Fantasia Diamond, Robin of Sherwood, Adventure Quest, Dungeon Adventure, Terrormolinos, Emerald Isle.
Alistair McBain, 52 Fox Covert Avenue, Corstorphine, Edinburgh

Lord of the Rings, Necris Dome, DAA 'n' Everything, Case of the Mixed-up Shymer
Paul Sawyer, 57 Everard Street, Barry, S Glamorgan, CF6 6PX

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David Liddell, 91 Orbistion Drive, Bellshill, Lanarkshire, ML4 2LX

Hitchikers Guide to the Galaxy
Ben Taylor, 5 Hope Street, Old Glossop, Derbyshire, SK13 9SB

Solar System – continued from page 74

```
690 B=ATN(D(P,13)*TAN(D(P,11))*SIN(L-D(P,12))/(D
    (1,1Ø)*SIN(D(P,12)-D(1,8)))):RETURN
7ØØ N=(36Ø*D)/(365.2422*D(P,1))
71Ø WHILE N>36Ø:N=N-36Ø:WEND
72Ø M=N+D(P,2)-D(P,3):IF M<Ø THEN M=M+36Ø
73Ø RAD:M=M*PI/18Ø:E=M:DL=1
74Ø WHILE DL>Ø.ØØØØØ1:J=E-(D(P,4)*SIN(E))-M
75Ø DE=J/(1-D(P,4)*COS(E)):E=E-DE:DL=ABS(J)
76Ø WEND:E=E+DE
77Ø X=SQR((1+D(P,4))/(1-D(P,4))):X=X*TAN(E/2):V=2
    *ATN(X):V=V*18Ø/PI:DEG:D(P,9)=V:L=V+D(P,3):
    D(P,8)=L
78Ø R=D(P,5)*(1-D(P,4)^2)/(1+D(P,4)*COS(D(P,9))):
    D(P,1Ø)=R
79Ø RETURN
8ØØ FOR AN=1 TO 36Ø STEP K
81Ø X=D(P,5)*(COS(AN)-D(P,4)):Y=D(P,5)*SIN(AN)*
    SQR(1-D(P,4)^2)
82Ø X1=X*COS(D(P,3))-Y*SIN(D(P,3)):Y1=X*SIN(D
    (P,3))+Y*COS(D(P,3))
83Ø PLOT X1*S,Y1*S,2
84Ø NEXT AN
85Ø X2=D(P,5)*(COS(D(P,9))-D(P,4))*S:Y2=D(P,5)*
    SIN(D(P,9))*SQR(1-D(P,4)^2)*S
86Ø X3=X2*COS(D(P,3))-Y2*SIN(D(P,3)):Y3=X2*SIN(D
    (P,3))+Y2*COS(D(P,3))
87Ø FOR AN=1 TO 36Ø STEP 12:MOVE X3,Y3
88Ø DRAW X3+2*COS(AN),Y3+2*SIN(AN),3
89Ø NEXT AN:RETURN
1ØØØ Y=Y-1:M=M+12:RETURN
1Ø1Ø IF SGN(X)=1 AND SGN(Y)=1 THEN Q=1
1Ø2Ø IF SGN(X)=-1 AND SGN(Y)=1 THEN Q=2
1Ø3Ø IF SGN(X)=-1 AND SGN(Y)=-1 THEN Q=3
1Ø4Ø IF SGN(X)=1 AND SGN(Y)=-1 THEN Q=4
1Ø5Ø IF F<Ø THEN F=F+36Ø
1Ø6Ø GOSUB 116Ø
1Ø7Ø IF Q1=Q THEN RETURN
1Ø8Ø F=F+18Ø
1Ø9Ø GOSUB 116Ø
11ØØ IF Q1=Q THEN RETURN
111Ø F=F-36Ø
112Ø GOSUB 116Ø
113Ø IF Q1=Q THEN RETURN
114Ø F=F-72Ø
115Ø RETURN
116Ø IF F>=Ø AND F<=9Ø THEN Q1=1
117Ø IF F>9Ø AND F<=18Ø THEN Q1=2
118Ø IF F>18Ø AND F<=27Ø THEN Q1=3
119Ø IF F>27Ø AND F<=36Ø THEN Q1=4
12ØØ RETURN
121Ø E=23.441884:D=SIN(B)*COS(E)+COS(B)*SIN(E)*SIN
    (L):D=ATN(D/SQR(-D*D+1)):Y=SIN(L)*COS(E)-TAN
    (B)*SIN(E):X=COS(L)
122Ø F=ATN(Y/X):GOSUB 1Ø1Ø:A=F/15
123Ø IF SGN(A)=-1  THEN GOSUB 13ØØ
124Ø IF SGN(A)>=Ø THEN GOSUB 131Ø
125Ø GOSUB 134Ø
126Ø IF SGN(D)=-1 THEN GOSUB 132Ø:SD$="-"
127Ø IF SGN(D)>=Ø THEN GOSUB 133Ø:SD$="+"
128Ø GOSUB 14ØØ
129Ø RETURN
13ØØ B=ABS(FIX(A)):B1=INT((ABS(A)-ABS(B))*6Ø):
    RETURN
131Ø B=INT(A):B1=INT((A-B)*6Ø):RETURN
132Ø C=ABS(FIX(D)):C1=INT((ABS(D)-ABS(C))*6Ø):
    RETURN
133Ø C=INT(D):C1=INT((D-C)*6Ø):RETURN
134Ø B$=STR$(B):B1$=STR$(B1)
135Ø IF LEN(B$)=2 THEN B$=MID$(B$,2,1):B$="Ø"+B$
136Ø IF LEN(B$)=3 THEN B$=MID$(B$,2,2)
137Ø IF LEN(B1$)=2 THEN B1$=MID$(B1$,2,1):B1$="Ø"+
    B1$
138Ø IF LEN (B1$)=3 THEN B1$=MID$(B1$,2,2)
139Ø RETURN
14ØØ C$=STR$(C):C1$=STR$(C1)
141Ø IF LEN(C$)=2 THEN C$=MID$(C$,2,1):C$="Ø"+C$
142Ø IF LEN(C$)=3 THEN C$=MID$(C$,2,2)
143Ø IF LEN(C1$)=2 THEN C1$=MID$(C1$,2,1):C1$="Ø"
    +C1$
144Ø IF LEN(C1$)=3 THEN C1$=MID$(C1$,2,2)
145Ø RETURN
15ØØ IF P=1 THEN K=1 ELSE IF P=2 THEN K=3 ELSE IF
    P=3 THEN K=1.5 ELSE IF P=4 THEN K=Ø.7
154Ø RETURN
155Ø IF P=5 THEN K=3.5 ELSE IF P=6 THEN K=2 ELSE
    IF P=7 THEN K=1.1 ELSE IF P=8 THEN K=Ø.7 ELSE
    IF P=9 THEN K=Ø.6
16ØØ RETURN
21ØØ PRINT:PRINT:PRINT"Enter year(e.g.1978)":PRINT
    "        month(1-12)":PRINT"        day(1-31)":
    PRINT"        hour(Ø-23)":PRINT"        minute(Ø-
59)":PRINT:PRINT:RETURN ●
```

Rotating Polygons

Alan and Gavin Parry bring you a most effective graphics demo. Just type in the number of sides of the polygon, wait for it to draw, then see it whizz along with a retreating horizon behind it. Simple but effective. The option is given to load or save screens created with the program.

```
1Ø ' Rotating Polygons
2Ø ' By Alan with help from Gav '
3Ø ' Amstrad Action December 1988
4Ø MODE 1:DEG:P=1:INK Ø,Ø:BORDER Ø
5Ø INPUT"(L)oad / (S)ave? ",f$:f$=UPPER$(f$)
6Ø IF f$="L"THEN MODE Ø:LOAD"!FILE.SCR",49152:spd
   =2ØØ:GOTO 25Ø
7Ø p=1:PRINT:spd=2ØØ:INPUT"Sides: ",sides:MODE Ø
8Ø FOR a=Ø TO 13Ø STEP 2:PLOT Ø,a,p:DRAWR 639,Ø
9Ø IF ed=Ø THEN p=p+1:IF p=16 THEN p=1
1ØØ IF ed=Ø THEN ed=5-(INT(ABS(a/25)))
11Ø ed=ed-1:NEXT
12Ø p=1:ed=Ø
13Ø FOR d=19Ø TO -19Ø STEP -2:IF ed=Ø THEN ed=8-
    (INT(ABS(d/3Ø)))
14Ø ed=ed-1:IF ed=Ø THEN p=p+1:IF p=16 THEN p=1
15Ø PLOT 32Ø+19Ø,2ØØ,p
16Ø FOR a=Ø TO 18Ø STEP 36Ø/sides
17Ø DRAW 32Ø+19Ø*COS(a),2ØØ+d*SIN(a)
18Ø NEXT:NEXT:x=Ø
19Ø IF TEST(x,2Ø2)=Ø THEN PLOT x,198,13:PLOT x,
    2ØØ,9:PLOT x,2Ø2,5:PLOT x,2Ø4,1 ELSE 21Ø
2ØØ x=x+4:GOTO 19Ø
21Ø x=639
22Ø IF TEST(x,2Ø2)=Ø THEN PLOT x,198,13:PLOT x,2ØØ
    ,9:PLOT x,2Ø2,5:PLOT x,2Ø4,1 ELSE 24Ø
23Ø x=x-4:GOTO 22Ø
24Ø IF f$="S"THEN SAVE"!file.scr",b,49152,16384
25Ø ' * Rotating Colours * '
26Ø FOR a=1 TO 7:INK a,6:NEXT:FOR a=8 TO 15:INK a,
    26:NEXT
27Ø p=1:o=8
28Ø INK p,26:INK o,6
29Ø p=p+1:IF p=16 THEN p=1
3ØØ o=o+1:IF o=16 THEN o=1
31Ø FOR z=Ø TO spd:NEXT:spd=spd-1Ø:IF spd<Ø THEN
    spd=Ø
32Ø IF INKEY$=" "THEN RUN
33Ø GOTO 28Ø ●
```

THE BUYERS GUIDE CHRISTMAS MEGAMIX

Whether you're looking for presents to buy or ones you're hoping to receive, this is the place to look. We've boiled down months of buyers guides to present the essential list of CPC hard- and software. Take this shopping with you and your bank manager may live to regret it...

Printers... Printers... Printers... Printers...

Epson LQ500
Epson ■ £803 rrp ■ *AA29*

Features galore – and price to match. Handles both the up-market Sans Serif/Roman styles of NLQ, for instance. And you can get a colour-printing upgrade kit. 24 pin printer, offering excellent quality printing. Control panel is to select from many available fonts (ie. the same font at different widths).

Amstrad DMP3160
Amstrad ■ £228.85 ■ AA29

Almost exactly the same in operation as the DMP2160, but a bit faster.

Can accept all the IBM printing codes as well as Epson's. The NLQ shares the same sensible front loading system.

A good buy for the price.



Epson LX800
Epson ■ £320.85 ■ AA29

Extremely fast for a 9 pin. Control panel for style selection, and Epson compatible.

Reverse winding sheets through the printer requires more care than usual, though.

Amstrad DMP4000
Amstrad ■ £401.35 ■ *AA20*

A real text crunching machine, a halfway house for Amstrad between DMP2000/3000 home use and LQ business use. Wide carriage, and really flies across the paper, up to about 200 cps)in NLQ about 50 cps). Fonts available: standard 9 pin Pica, Elite, condensed etc. But they are different, rather than just adjusted spacing for the same characters.

Amstrad LQ3500
Amstrad ■ £401.35 rrp ■ AA31

Cheapest 24-pin printer available. Paper is loaded from the rear, making loading more time consuming. Manages about 30 cps in letter quality mode, and 62 cps in draft. Print quality is excellent, with plenty of different type-styles are built into the printer.

Speed is nothing to write home about.

Epson EX800
Epson ■ £458.85 ■ AA29

Epson's mid-price printer. Can be upgraded in 101 ways – cut sheet feeds, serial ports, longer life ribbons. Quiet, with respectable printing speed. Sans Serif/Roman NLQ fonts incorporated. Control panel to select fonts – just the same font with different spacings.

Star LC10
Star ■ £263.35/£297.85 rrp ■ AA32

First price is for standard dot matrix printer, a good, no nonsense machine. Fonts selected by button, rather than typing in fiddly control code. Centronics port on the side, taking up space.

Common to both models is the plastic paper feeder.

Second price is for relatively inexpensive colour model. Uses multi-colour ribbon to produce different mixes.



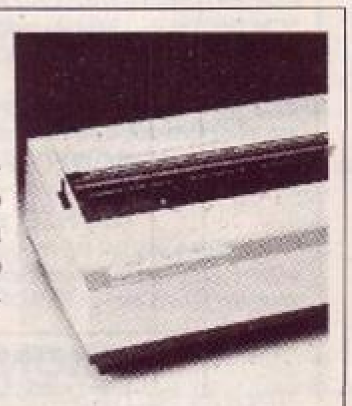
Amstrad DMP/2160
Amstrad ■ £159.95 ■ AA6

Load through front. So printer must be above paper; but loading continuous stationery is much easier. Poor NLQ mode. £5 for ribbons. A low priced printer, rather than a bargain.

Panasonic KXP3131U
Panasonic ■ £335.25 (discont.) ■ *AA29*

Daisywheel therefore superb quality – but can't print bit graphics (no trendy screen dumps), and if you want different fonts, you have to plug in a different Diablo-compatible one.

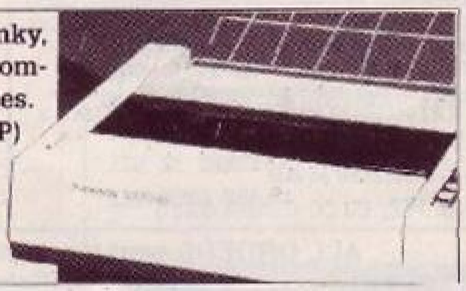
Not quiet.



Panasonic KXP1081
Panasonic ■ £245 rrp ■ AA29

Similar to DMP2000/2160: chunky, 9 pins, 10 inch carriage and compatible with Epson codes. Thorough A4 manual, good NLQ mode (better than the DMP) and a switch to select condensed, draft and NLQ modes.

Often available at discount through independent distributors.

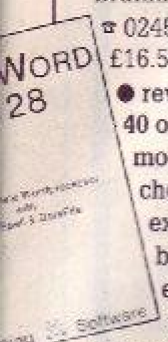


Contacts

Amstrad ☎ 0277 230222
Dart ☎ 0502 513707
Frontier e ☎ 0423 67140
Goldmark ☎ 07072 71529
Panasonic ☎ 0753 73181
Epson Uk Limited ☎ 01 902 8892
KDS Electronics ☎ 04853 2076
Seven Stars ☎ 06284 3445
Star Micronics ☎ 01 840 1800

Word processors

➤Brunword 6128



Brunning Software
☎ 0245 252854
£16.50 tape, £25 disk
● reviewed *AA24*

40 or 80 column mode; in-built spell checker loaded into extra memory. Can be used by expanded 128K machines. Superscript and subscript effects appear on-screen. Some on-screen operations such as centering and cursor movement can be slow. And files cannot be loaded into other word-processors.

➤Mini Office II

Database Software ☎ 0625 879940
£14.95 tape, £19.95 disk ● reviewed AA6

If you don't need full specification *Mini Office II* is the one to buy. For what is a remarkably low price you get a word-processor, database and a spreadsheet, plus other goodies such as comms software. Packaging and documentation good, and programs work in a menu environment. Worth considering if you're short of pennies (and who isn't?).

➤Pendown

Logotron,
£19.50 disk only
Reviewed AA18

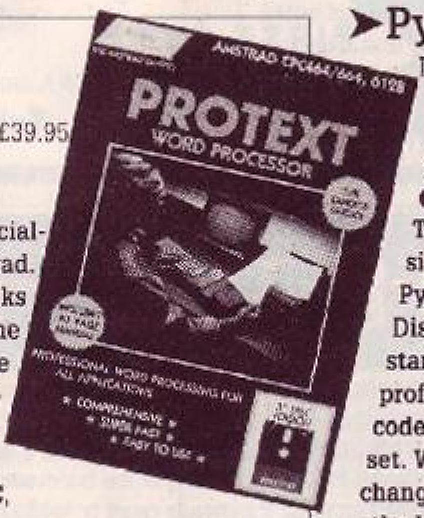
Pendown offers a complete tutorial in the theory and practice of the subject. It is a very open system, owing a lot to expensive DTP packages. Generally more people learn about the subject by means of *Tasword:* but *Pendown* is a lot more fun. Built into the product are different fonts to print with. You can't see them on screen but they make the end result much better. Even so, *Pendown* lacks many features, and one day you're going to want to move up.

➤Protext

Arnor ☎ 0733 239011
£19.95 tape, £26.95 disk, £39.95 ROM
● reviewed AA3

One of the first wp's especially for the Amstrad. Lightning fast at all tasks involving screen. True merging from separate files and disks to the cursor position is easy, and *Protext* supports standard CPC RSX's like DISC, TAPE, CAT etc.

Having software on ROM is excellent. Bad points: maximum file space limited to machine memory – about 22K on disk, 38K for the ROM version. Daunting: but worth the effort.



➤Pyraword

Discovery ☎ 0742 753423
£14.95 tape, £17.95 disk
● reviewed AA18

This program is similar in use to Pyradev, also from Discovery. When starting up it loads a profile of inks, printer codes and the character set. Word counting, changing disk drives etc – the housekeeping tasks of any program – are handily located. The program uses the extra memory of 128K machines for spooling printed documents and storing text.

Unfortunately true merging of files is not possible, and the control keys are a little strange at first. The margins cannot be set further apart than 80 columns, although placing a printer control character at the right hand side will allow wider documents to be printed.

➤Tasword

Tasman Software
● 0532 4388301
464, 464D, 6128, £19.95 tape, £24.95 disk
● reviewed *AA1*

A veritable herd of different releases. 464 is the tape based version, exactly the same as Amsword. 464D has a few enhancements for a disk drive. 6128 makes full use of a 6128's extra memory. The latter pair include a mailmerge facility as standard. If you are new to word-processing then this is worth a look. It is very easy to get to grips with and comprehensive help screens are available when needed.

Many people never find a need to change from *Tasword*. But the screen operations are fairly slow, and reformatting text is done one word at a time. If you want speed, look elsewhere.



➤Wordstar

Micropro/Cumana ☎ 0483 571666 £49.95 disk only (CPM) ● reviewed AA1

'*Pocket Wordstar*' is what this really is. But anyone who has seen an incarnation of the real thing on a CPC can tell you it's a dinosaur. Be glad the faster *Pocket* version is available. One good feature: files can be as big as the space available.

A fully professional program, *Wordstar* has a manual bigger than some printers and a layout reminiscent of mission control. If you want a function, it is in there... somewhere. Not fast.

Databases

AtLast Plus

Rational Solutions ☎ 056681 511
£39.95 ● CPM+, 6128 only
Reviewed *AA*30

Powerful database that's developed into what users require. Data capacity is restricted only by disk size, and splitting fields into smaller pieces (elements) is supported. Printed output is impressive. Unfortunately calculations on fields is missing. Strongly recommended for sheer processing ability.

Masterfile III

Campbell systems ☎ 0378 77762
£39.95 CPM+
Reviewed AA30

Possesses a genuinely useful feature – parent/child records, which enable you to tie records together, saving considerable space and time.

Screen layouts and reports are menu selected and not for the fainthearted, but results are good.

Random Access Database

Minerva Systems ☎ 0392 37756
£29.95 disk only ● reviewed *AA6*

Very good mathematical and string operations make this a database to watch for.

Random disk accessing gives speed combined with power – and you can opt for a 40 or 80 column screen.

Can be a little unresponsive to keys.

Ultrabase

Beebugsoft ☎ 0727 40303
£14.95 tape, £17.95 disk
Reviewed AA6

Retains all data in memory, a feature giving fast search and sort options on the plus side, but reduced capacity on the minus side.

Record format is fixed, which makes entry a little tiresome. Excellent price for a database, though, and featuring 'fuzzy logic' search option.

DEMON DEVELOPMENT CARTRIDGE

The Ultimate machine code tool. Suitable for 464/664 and 6128 machines. Demon will give you full control of your Amstrad. Stop Any program Anytime by a press of a button, the memory remains intact and can be saved to Tape/Disc, debugged, traced, moved, disassembled etc. Inline Z80 assembler, Bank switching for 6128 machines etc. etc. More functions than ANY other unit of this type on the market.

Demon Cartridge with user manual only £24.95 (note no through connector).

EPROM PROGRAMMER

Transfer your favourite programs onto Eprom.
Suitable for 464/664 and 6128 machines.

- Programs 2764 and 27128 type Eproms.
- Switchable for 12.5 or 21 volt types
- Normal or Fast algorithmn programming
- Powerful but easy to use software
- Rom to Rom copy, Editing, Verification.
- Single or block programming.
- Full screen Editing for BIN files
- Completely self-contained in smart impact resistant case. (No messy separate power supply)
- 12 months parts and labour guarantee

Eprom Programmer, Software & 12 months guarantee Only £39.95
Available in kit form with through edge connector (uncased) £31.25
Blank 16k Eproms available phone for latest prices

EPROM EXPANSION BOARD

Holds 4 EPROMS. Suitable for Maxam, Protext, Utopia etc, etc.
Top quality silk screen-printed PCB measures 7cm x 12cm approx with through edge connector to allow the use of Disc (464) or other peripherals.

Complete Kit of parts, with instructions to build it yourself £16.75
Ready built and tested only £21.95

PCB DESIGNER III

Design double side printed circuit boards quickly and easily with this powerful software. Used by universities and government establichments. Some of the main features are:-
Double sided 200mm x 131mm (8" x 5.25") board.
Nine print options for standard Epson or compatible printer (DMP 2000).
Predefined DILS, IDCs from 8pin to 64 pin, horizontal or vertical placing.
Single pads, lines, blocks and edge connectors at the touch of a key.
Auto Routing and common bussing.
Suitable for microprocessor and related projects.
Minimum system requirements to run this software are:- Amstrad 464 Mono Monitor and Printer.
Supplied on cartridge (just plug in and go) only £89.95 (note no through edge connector). Evaluation cartridge with Save & Load routines removed only
£25.00 refundable against purchase of main cartridge

PASCAL COMPILER ROM

Our Pascal compiler is easy to use, suitable for the absolute beginner and produces stand alone Machine code. Does NOT require CPM. A built in text editor and combined compiler makes the program easy to use. The user manual supplied will teach you how to write programs and contains many examples, these include games and useful utilities.The compiler produces very fast machine code for example:- BASIC PLOTx,y (10000 times) 12.46 secs Pascal Plotxy (10000 times) 2.1 secs. Supplied on Eprom with user manual only £19.95 or Cartridge £24.95

Many other items in stock including Public Domain CPM software at £2.50 per disc.

JOHN MORRISON Dept. A.A.
4 Rein Gardens, Tingley, West Yorkshire, WF3 1JR
Telephone: (0532) 537 507
Return of post service on Access or POs. Please allow 3 days for cheques

WHAT?!!

YOU HAVEN'T BOUGHT THE MICRO MUSIC CREATOR?

The **Micro-Music Creator**, for all Amstrad CPC computers, lets you produce startling three-track musical compositions and digitised sound effects. The results can be incorporated into your own programs with the minimum of fuss. Can you afford not to get hold of a copy?

Tape £9.95, Disk £14.95, Rom £24.95

Please make cheques/PO's payable to First Byte Software. All prices include VAT & P&P.

CAN ALL THESE PEOPLE BE WRONG?

THE REVIEWERS:
Friendly, packed with options... wonderfully priced. **Amstrad Computer User**
User-friendly, fast... easy to use. **Amstrad Action**
Value for money... 10 out of 10. **Computing With The Amstrad**

THE USERS:
I am delighted with it. **Peter Asbury-Smith, London**
Very good value for money. **G Waite, Leeds**
Very pleased with the programs. The youngsters enjoy playing Empty Tummy. **GL Palmer, Rotherhithe**

FIRST BYTE SOFTWARE

71 Barn Glebe, Trowbridge, Wiltshire, BA14 7JZ
Tel: 0225 765086

ZENITH SOFTWARE

WORDBASE
An easy to use and flexible database for the Amstrad CPC 464/664/6128

Quick and easy to setup. No need to define field lengths, WordBASE doesn't pad fields out to a set length but only stores the data you type in. Fields can be added or deleted at will.

Records. WordBASE uses variable length records with up to 255 fields per record and up to 255 characters per field. On a 128k machine you have a massive 65,000 character space to store records in.

Data entry/editing. Data can be entered/edited quickly and easily using the cursor keys to select the required record/field.

View/list records. Send records to screen, printer or to an ASCII file on disc with the minimum of fuss.

Sorting records. Your can sort records using multiple fields (in a user-defined order) in ascending or descending order

Search records. Search over multiple fields or any single field using wild-cards and the greater than, less than and equal to conditions.

Tagged records A record can be tagged simply by the press of a key. While using WordBASE you are given several options which allow you to work on tagged/non-tagged records only these include ignore records, save records, delete records, search records and print/list records.

Text editor. An easy to use, no-nonsense text editor. Compatible with ASCII files from most popular word processors.
Mix database records with the text, this would allow you to define a card index template, etc. Send output to the screen, printer or to an ASCII file on disc.

Disc Commands. You can use all the major AMSDOS commands from within WordBASE.

Manual.
The manual contains full instructions, a tutorial section and the relevant information for those wishing to transfer records from other databases.

Supplied on 3" Amsoft disc.
WordBASE costs £12.95.

Z - PACK
The complete machine code tool-pack

Z-Pack will not break into machine code automatically. It's up to you to do that.

Some of Z- Pack's features

Memory Editor. View ROM. Alter/view RAM including the extra banks on 128k machines.

Z80 Disassembler. *NOW! Disassembles the undocumented opcodes*
Disassemble RAM or ROM quickly and easily, send output to screen, printer or an ASCII file on disc.

Calculator. Enter hex , decimal and binary numbers to add, subtract, multiply, divide, AND XOR and OR.

Powerful Block Commands Define a block of memory simply by placing a couple of markers from within the memory editor, you can then alter Block, Move Block, Search Block, Print Block and Save Block.

What Amstrad Action said about Z -Pack. (Issue 38 Nov/88)
'Without doubt this is one of the best disassemblers around. The screen update is fast, the disassembler can scroll up as well as down and the calculater saves messing about.'

Supplied on 3" Amsoft disc, complete with a quality manual.

Z - Pack costs £10.95

All prices include P&P in the UK only
Send a SAE for more details.

ZENITH SOFTWARE
11, Bude Street, Appledore, Bideford, North Devon. EX39 1PS

TELETEXT

A world of information at your fingertips

A Microtext Adaptor turns your 464 or 6128 into a sophisticated Teletext Receiver. Giving you access to any of the hundreds of free pages from Cefax or Oracle. As well as up-to-the-minute news or football results, there's the local weather or even bargin holidays. And Teletext caters for special interests, like computing, motoring, or gardening, you'll find things to do and places to go in your area plus much much more.

But unlike a Telextet TV, a Microtext Adaptor allows you to do a lot more with the information, you can save a page to disc or cassette, perhaps to keep a watch on share prices, or print pages like what's on TV. There's free software too! Amstrad software is broadcast in a special format on Channel 4 for Microtext users to download. Plus you can access and use Teletext data from your own programs, proividing endless possibilities.

The Microtext Adaptor fits neatley on the expansion port, it comes with software and is very easy to use. Just connect it with the lead supplied to the VIDEO OUT or AV socket of a video recorder and change channels with the controls on the video or, there's our own Tuner which has been specially designed to provide the signal that the Adaptor needs, plug in an areial, it tunes itself in (!) and channels are selected from your keyboard. Tune into Teletext, a world of information at your fingertips.

'A well thought out product that performs admirably.'
Amstrad Action Sept. 88

A Microtext Adaptor for use with a video is only **£74.95** Adaptor and Tuner just **£124.90** Prices include p/p & VAT.

Instructions are provided to transfer software to disc. Disc's are available for **£5.00 extra**

VISA

Please send cheques/PO's to

MICROTEXT
Dept AA 7 Birdlip Close, Horndean, Hants PO8 9PW
Telephone: (0705) 595694

Adventures to get excited about

- **The Bard's Tale**
  Electronic Arts *AA*36 90% £8.95 c/£14.95 d
- **Gnome Ranger**
  Level 9 *AA*28 85% £9.95/£14.95
- **Guild of Thieves**
  Magnetic Scrolls/Rainbird *AA*29 89% £19.95 (disk: 128K RAM)
- **Hitchhikers Guide to the Galaxy**
  Infocom *AA*5 93% £19.95/£24.95
- **Ingrid's Back**
  Level 9 *AA*38 82% £9.95/£14.95
- **Jewels of Darkness**
  Rainbird *AA*23 £14.95/£19.95
- **Jinxter**
  Magnetic Scrolls/Rainbird *AA*30 88% £19.95 (disk: 128K RAM)
- **Knight Orc**
  Level 9/Rainbird *AA*28 84% £14.95/£19.95)
- **Lancelot**
  Level 9 *AA*38 80% £9.95/£14.95
- **Leather Goddesses of Phobos**
  Infocom *AA*1591% £24.99 (disk)
- **Lord of the Rings**
  Melbourne House *AA*6 85% £15.95/£24.95
- **Lurking Horror**
  Infocom *AA*27 94% £24.99 (disk)
- **Mindfighter**
  Abstract Concepts/ Mediagenic *AA*35 84% £14.99 /£19.99
- **The Pawn**
  Magnetic Scrolls/Rainbird *AA*19 92% £19.95 disk only (128K RAM)
- **Shadows of Mordor**
  Melbourne House *AA*21 81% £8.95 (cass)
- **Silicon Dreams**
  Rainbird *AA*17 88% £14.95/£19.95
- **Time and Magik**
  Level 9/Mandarin *AA*34 92% £14.95/£19.95
- **Wish Bringer**
  Infocom *AA*9 92% £28.70 (disk)
- **Zork I**
  Infocom *AA*5 86% £19.95 (disk)

THESE WE HAVE LOVED: THE YEAR'S *MASTERGAMES*

- January – *Driller* (Incentive)
- February – *Bobsleigh* (Digital Integration)
- March – *Deflektor* (Vortex/Gremlin)
- April – *Advanced Tactical Fighter* (Digital Integration)
- May – *Cybernoid* (Hewson)
- June – *Nebulus* (Hewson/Gremlin)
- July – *Dark Side* (Incentive)
- August – *Target Renegade* (Imagine)
- September – *The Bard's Tale* (Electronic Arts)
- October – *Heroes of the Lance* (US Gold)
- December – *Cybernoid II* (Hewson)

Spreadsheets

■ Mastercalc 128

Campbell Systems ☎ 0378 77762

£33 disk, 128K machines ☎ reviewed AA4

Can display two different parts of a spreadsheet at the same time. Includes notepad and calculator. Easy to use, but the mathematical formulae can only consist of the four basic arithmetic options. It slows down as more data is entered.

■ Supercalc II

Amsoft/Sorcim ☎ 0277 230222

£49.95 CPM+ ● reviewed AA4

Originally this program cost £200, but was soon cut. Documentation is first class. Calculations can be determinative, – they will be performed on whether or not a cell's contents match a given value. Help prompts plentiful if n0eeded and arithmetic functions excellent.

■ Cracker

Newstar Software ☎ 0277 229509

£49.95 disk CPM+ ☎ reviewed AA9

Spreadsheets must be created from scratch. Documentation well written; command sequences are soon learned. Mathematical functions very well catered for, and include random numbers. Files limited to 17K long – you soon run out of space, and formulae programming is not well implemented.

■ Matrix

Audiogenic Software ☎ 0734 303663

£34.95 disk ● reviewed AA18

Uses disk to store data – hence good capacity but poor speed. Graphic options on Matrix shames other spreadsheets. On screen prompts are rare, making it hard going at first. Calculating power good.

ADVERTISERS INDEX

Don't miss the next *AMSTRAD ACTION*-packed issue – out on JANUARY 12th!

AAfterthought

All too soon, the end of another issue is almost upon us. But before we go...

The CPC character set

1. The games addict



Aged 12 and three quarters, the games addict is obsessed. Well into his third joystick and with a list of games that runs to 28 pages (most of them copied on a reciprocal basis from friends), he swaps like crazy, reads Amstrad Action – and especially Action Test – from cover to cover every month and jealously guards his almost complete set (he's missing five issues, and would willingly sell his big sister for any one of them. Come to think of it, he'd give her away if he thought anyone would have her).

He's going to be a programmer when he grows up, he says, or failing that a computer magazine writer. He often submits cheats, pokes and maps, though he sometimes forgets to put a stamp on the envelope. His room, a poster plastered tip, is a chaotic shrine to Maria Whittaker, Mike Van Wyjk and a dozen indistinguishable overdeveloped sourfaced vigilantes with blood leaking unconvincingly from numerous body wounds and wielding guns that wouldn't fire in a million years.

He wrote to AA once, asking them to send him every review of every game they'd ever received, but it still hasn't come. Must be in the post.

He's deathly pale and has bloodshot eyes because he never comes out of his room and plays in total darkness. He's partially deaf as a result of the years spent listening over his headphones to appalling game soundtracks (the latest of which he hums constantly, to his mother's intense annoyance). He has chronically overdeveloped muscles in his right wrist from joystick waggling, a bad back from leaning hunched over his CPC all evening, and a series of bad school reports compaining that when he's not falling asleep in class he's drawing disturbing images of urban violence.

So he does CPC games – no problem, he can handle it. Could give up any day he wanted. Maybe tomorrow...

Next month's member in the CPC character set is the club secretary

Twenty things you never knew about your CPC

1. Sylvester Stallone writes all his scripts using a CPC – *without turning on the power.*
2. When the SAS stormed the Iranian Embassy in 1980 they used CPC power leads to tie up the prisoners.
3. Paul Hogan used profits from *Crocodile Dundee* to buy over 4,000 CPCs. *And he can't even type!*
4. Marilyn Munroe died before the CPC began production.
5. So did Attila the Hun.
6. Basil Fawlty, proprietor of *Fawlty Towers*, is seen in the sixth episode (the one with the Germans) to throw a CPC out of a third floor window.
7. In the next scene he is then shown plugging it in. And, astonishingly, *it doesn't work!*
8. In the latest series of *Moonlighting* (the one we haven't seen yet), David decides to throw out all those stupid Macintoshes. Maddie disagrees, and shoots herself. Then David wakes up – it was all a dream!
9. The solder used in CPCs are made from melted down fittings from the *Titanic*.
10. It has been discovered that CPC users rarely have bad breath.
11. The colours on a CPC are brighter than those on any other computer in the world, with a few exceptions.
12. Ghost hunters have reported a strange glow coming from the Escape key on some 464s.
13. Marlon Brando turned down the part of Alan Sugar in a filmed biography: 'I can't smile like that', he confessed.
14. *The Sunday Sport* revealed that a CPC had been discovered on the moon, and had just as mysteriously vanished.
15. Kangaroos are allergic to CPCs.
16. CPC stands for 'Clean Paper Clips'. *(Is that right? Oh yes, it's well known. Really? You do amaze me sometimes.)*
17. HRH Prince Charles is a keen *Cybernoid* fan.
18. There are more CPCs in Britain than there are pineapples in Switzerland, probably.
19. February's *Amstrad Action* is on sale on 12 January.
20. Apart from that, I made all this stuff up in my lunch hour.

● Next month: twenty things you never knew about the CPC's pin 27

Avoid the queues!

Well folks, that's it for another month. There is no more. Still, hang on four short weeks and we'll be back with February's action-packed *Action*. We can promise you a free second disk drive on the cover, or we can tell you the truth, which is that we haven't got the foggiest what we'll be doing by then. But it'll be good!

By the way, if you've been having problems getting your hands on a copy, why not reserve one? Your newsagent will be glad to oblige. Just hand him this reservation slip and make life a little easier.

To the newsagent: *Amstrad Action is distributed by Seymour Press*

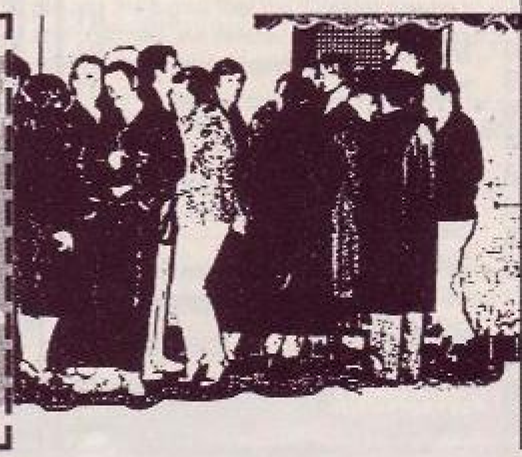
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HEY!
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(See next page for Order Codes)

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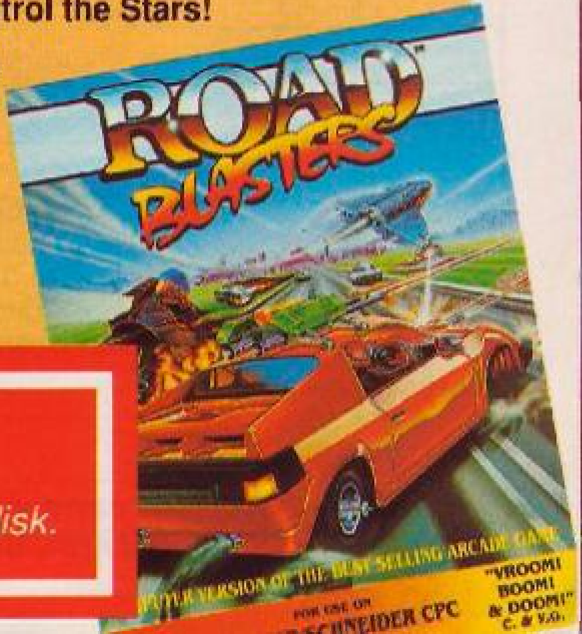
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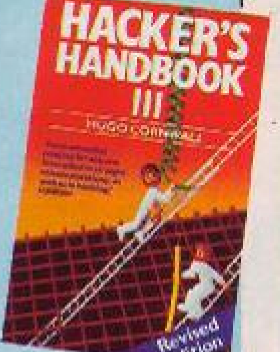
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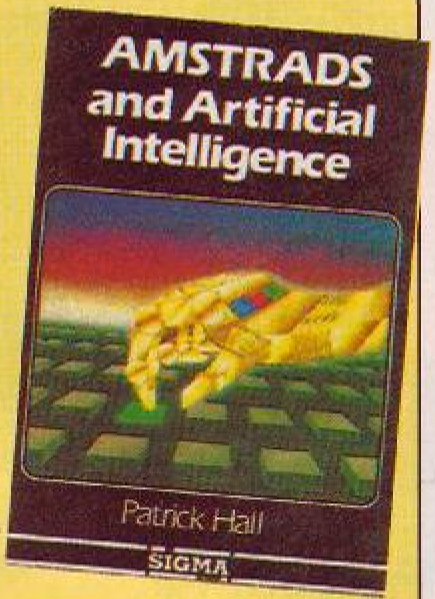
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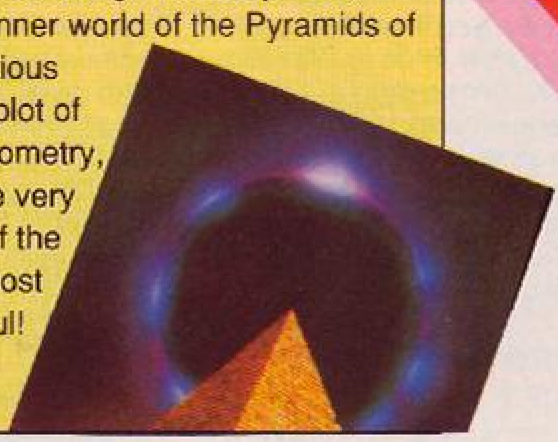
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Expand your Amstrad Action collection!

If you're one of the thousands of readers who've joined *Amstrad Action* only recently, you'll want to catch up on some of the good things you've missed. Here's how to do it. We have limited numbers of the back issues listed below, which we're selling at cover price with post and packing free.

Issues 8 and 16 may be of particular interest, as both include free cassettes packed with good software. Two series also went down very well. Andy Wilton's programming course in Basic for absolute beginners ran from issues 8-17, while a series of articles on the CP/M operating system ran from 10-17.

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